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THE MEDICAL JOURNAL OF AUSTRALIA

(With which "The Australasian Medical Gazette," and "The Australian Medical Journal" are incorporated.)

The Journal of the Australian Branches of the British Medical Association.

VOL. I.—3RD YEAR—NO. 4. SYDNEY: SATURDAY, JANUARY 22, 1916. PRICE 6D.

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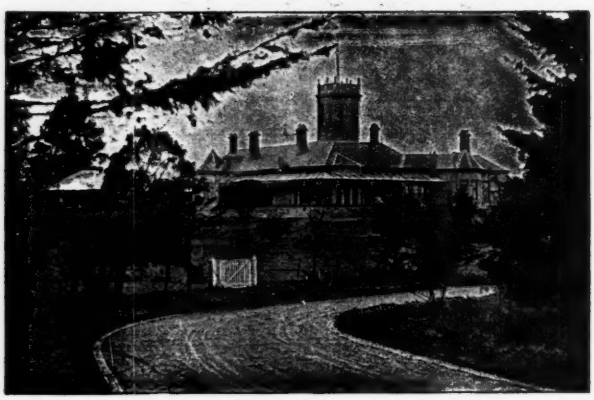

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THE MEDICAL JOURNAL OF AUSTRALIA.

VOL. I.—3RD YEAR. SYDNEY: JANUARY 22, 1916. No. 4.

SURGICAL EXPERIENCE AT THE FRONT.[1]

By **R. A. A. Wallace, M.B., Ch.M., F.R.C.S. (Eng.),**
Melbourne.

The experience on which the following lecture is based was gained during eight months' service in France with the Lady Dudley Australian Voluntary Hospital. About six weeks of September and October, 1914, were spent at St. Nazaire sur Loire, and the rest, until May 15, at Wimereux, near Boulogne, Hospital Base.

The wounded made a journey of nearly 200 miles, and lasting three to five days, to the first base, but only 30 or 40 miles, lasting a few hours, at the second base. Latterly, the less seriously wounded, picked up at dusk, would come to us in motor char-à bancs, each holding 30 cases, at about 10 or 11 p.m.

A.—Medical Cases.

During the winter we had a large number of medical cases, the interest in which lies in the suggestions which may be offered to medical officers examining recruits. The Canadians who came to us were obviously passed by medical men not working under any hidebound set of rules, and though there were some glaring examples among them of conditions which would have caused rejection of an English recruit, I only had these brought to my notice incidentally by wounded men.

Suggestions.

(1) When you examine a recruit's teeth, look for sepsis, not for the number of teeth. There were men coming back continually. When there was a deficiency in the number of teeth a plate could be fitted in from five to eight days. But when there was dental sepsis, it often meant invaliding for two or three weeks.

(2) The pharynx is more important than the buccal cavity. More men are sent back, and for longer periods, for tonsillitis, chronic pharyngitis, and subsequent bronchitis, than for dental trouble.

(3) Large numbers of men come back for subacute rheumatism, in most cases secondary to chronic throat trouble. In a damp climate these men are quite unserviceable.

(4) Far too many men come back for obvious defects, which should be noticed by the examining medical officers, *e.g.*, phthisis, bunions, flat foot, hammer toe, hæmorrhoids, hernia, epilepsy, and dilated hearts, the result of valvular defect of long standing. Two glaring cases were one of unreduced dislocation of the right shoulder, and one of kyphosis, with ulcerated corn on the hump. As soon as the hot weather begins, many men start having trouble with varicocele. Whether this had developed since enlistment or not I am not sure, but a large number of men suffering from severe varicocele had to be sent back to England. Among the English "Tommies," too, general poor physique was the cause put down on the tickets of several who were sent back for base duties. I may mention that about the New Year we had an almost entirely new staff of orderlies sent to us—Lancashire factory hands—fine workers and keen as mustard, but few of them over five feet high. My opinion of them is that in six hours they can learn enough to be very good orderlies, and I hope the A.A.M.C. will, in future, not include so many fine, huge fellows; bantams are better for the A.M.C.

(5) Defective eyesight, which can be rectified by spectacles should not be regarded as a cause for rejection; these men can always be drafted into A.M.C. units at the very worst. Loss of an eye, if the socket is a clean one, and the other eye has keen vision, should allow the man to resume full duty in the trenches, and in several cases we sent these cases back to duty. On the other hand, deafness is a much more dangerous defect, although, on account of its exceeding frequency (from shell bursts) it was necessary to neglect it and send the men back to duty in a short time.

(6) Frost bite cases of no local interest.

(7) Typhoid vaccination as a preventative. A new polyvalent vaccine, prepared from the bacilli of the country, acted best, though at least 80% of the cases of typhoid we saw had never been vaccinated at all.

B.—Surgical Cases.

(1) There were not more than a dozen bayonet wounds admitted during the eight months, and nearly all these were caused by accidents with British bayonets. I believe they were all clean, and healed well.

(2) There were a number of cases of shell concussion and shock—spinal concussion, so severe in some that I remember one diagnosed as peritonitis, due to ruptured gut, the distended bladder and paralysis of the gut leading to this mistake. In the later stages these patients suffered greatly from "pins and needles" as sensation returned in their limbs. A few had hæmaturia, quickly clearing up.

(3) Cases with wounds caused by projectiles were, of course, the vast majority of all admissions. My impression is that about 60% of all wounds were caused by rifle bullets, but that, owing to the much larger number of operations for drainage and removal of fragments resulting from shell wounds, I received the impression as if the majority were shell wounds. There were a few pistol bullet wounds, which resembled the slighter cases of rifle bullet wound, and many wounds caused by fragments of stones, broken rifles, cartridges in belts, buckles of equipment and buttons, etc. Many eyes were lost by the spray from a bullet hitting the sandbag in

[1] Read at a Meeting of the Victorian Branch of the British Medical Association on September 1, 1915.

front of a soldier, or from a cartridge exploding in a camp fire.

The German shell explodes into small, square-edged, cystalline fragments, about 1 × ¾ × ¾ in. This makes the ideal projectile for maiming the enemy; it makes a big wound, takes in a big patch of clothing, and the whole stays in at a depth of four to eight inches; it is capable of breaking bone. It is, I am told, cast iron. It certainly looks quite different from the fragments of British and French explosive shells which I have seen. These latter are generally acicular or triangular (tetrahedral) in shape, and the fragments are often not properly separated, so that one gets big pieces, the size of a saucer, composed of half separated small pieces.

Bullet Wounds.

About half the bullet wounds are typical. There is a small entrance and a small exit wound, and not much damage between, even at the closest range.

About 25% show evidence of ricochet (or, as the men declare, reversal of the bullet in the case). The entrance is larger, and the track large and explosive in type. X-ray photographs will show a fine, nebular cloud of tiny lead particles scattered along the track, and here and there a larger patch, due to some of the steel, nickel-plated casing breaking off. This is nearly always the picture when a big bone is broken and the bullet retained.

Considering the energy which modern bullets possess, the frequency of their retention is considerable. It is probably due to the badly balanced bullet toppling sideways and then travelling with the heavy, base end forward. Many bullets in this position have been removed from a hæmatoma cavity, just under the skin. Examination will often disclose that it is not marked by lines or scratches, indicating previous contact with the ground.

When struck by a bullet still travelling at high speed, the whole limb suffers from the local shock. It is more or less anæsthetic at first, and the muscles are flaccid. Its resistance to bacteria is undoubtedly lowered, for we see saphrophytic germs readily flourishing. When the local shock disappears, the infection present often disappears with great swiftness.

General Considerations.

The first and most important fact for every military surgeon to learn and impress upon his mind, so that he will always act in accordance with it, is this: Every wound inflicted by a projectile is infected with more or less virulent organisms.

The second fact is that, other conditions being ual, this infection does damage in inverse proportion to the size of the wound or wounds in the n and deep fascia of the part.

The third fact, soon found out by experience, is it, provided the surgeon adds no more varieties organisms to those already present, nothing but od will ensue when small wounds are slit up, icks explored by Hilton's method, and drainage ablished in an efficient manner.

This universality of infection is due to different uses in different projectiles.

(1) In high velocity bullets it is due: (*a*) To the culiar hydraulic power of the bullet to drive small particles into the tissues at right angles to its track. This power, greatest just after penetration, results in the sowing of the skin or clothing bacteria into a cylindrical track of about 1½ inches diameter. (*b*) To the large amount of suitable culture-medium provided for these bacteria, owing to the disintegrating effect of the high velocity, and its capacity of making the tissues themselves act as secondary projectiles. The result is a track, perfectly straight, through the body at the moment of impact, which quickly widens in diameter, owing partly to these secondary particles, and partly to the slashing action of a "toppling" bullet.

An enlarged track like this may remain either open or comparatively closed at its exit end. When open, the result is the explosive type of wound, seen so frequently in the lower limbs, where the exit may be 12 inches in length by 4 or 5 inches in width in an average case. This huge, cone-like track may come from a tiny, typical entrance on the opposite side of the limb. When closed by a small slit or punched exit, under which a valve of fascia lata has slipped, this wound provides the culture tube for the organisms carried in by the bullet.

Gas-gangrene can and often does occur within a few hours of a wound of this sort.

(2) In low velocity projectiles, such as cores of ricochet bullets, shrapnel bullets, pieces of burst shell and splinters of broken rifles, there is invariably an infection, owing to the regularity with which the clothing and mud is carried into the wound, and the frequency with which the fragment lodges. On the whole, however, I have the impression that it is a less dangerous type of sepsis, and that I have seen far fewer ghastly cases from shell fragments than from bullet wounds of explosive type.

Types of Infection.

The conclusions that the Base experts had come to, I believe, was that for the first few days, in nearly every wound the multiplying bacteria were anaerobic. The aerobic and pyogenic organisms were present, and when the way was prepared for them by the action of the anaerobic organisms, the pyogenic organisms went ahead and were eventually more to be feared than the anaerobes. In some cases, *e.g.*, in hæmothorax, there was a slow development of anaerobes, resulting in a long-continued infection. When ribs were resected it was found that improvement, followed by a smart, secondary infection, with pyogenic germs, took place, causing the pleura to react. The large majority of cases showed a mild and favourable class of gas infection or cellulitis. Take a typical case; shell fragment entrance over gluteus medius muscle, the radiogram showing a piece deep in against neck of femur; the whole buttock red, wooden, and cracking; a probe releases some yellow-orange particles floating in a clear fluid, and some gas.

Operation.—A long, heavy sponge forceps is passed down the track until it has located the piece or can go no further. The point is cut down upon, a large tube is passed, the track from the entrance is enlarged for two or three inches downward, and, after thorough removal of all pieces of khaki from

the track, the whole is syringed with peroxide solution, under pressure, followed by a 2% to 4% saline solution. The wounds are dressed with double cyanide gauze, damped with 1% carbolic acid. In two days the phlegmon has gone, the tube is divided and removed in another two days. Syringing may only be used the once; foments of 4% saline may be used, and assist greatly. The bacteria in this case are probably *bacillus coli communis* and *bacillus perfringens* or *bacillus aerogenes capsulatus*.

The streptococci and staphylococci are there, and if the case is not promptly treated, the cellulitis may cause death in a very short time. These wounds are nearly always dry, very little pus is formed, only gas and shreddy edges are seen, and the greyish clear fluid first mentioned. When a fatal termination occurs, the patient looks the same up to an hour or two of death; it is only when the pulse is felt that the case is seen to be desperate. There may be a good colour, although the pulse cannot be felt.

The other type of gas infection is the malignant œdema or gangrenous type. This, instead of looking red, like a woody cellulitis, looks grey, white or marbled in colour, and this whiteness spreads rapidly, in spite of free incisions. It can only be treated by amputation; or, where this is impossible, pumping into the surrounding and infected tissues pure peroxide, with a Higginson syringe and exploring needle, until the whole area is resonant to percussion. This is done under an anæsthetic, and many incisions made to control the amount pumped in. Morphine is used to combat the shock of the operation.

Every large wound was infected at an early stage with saprophytic bacteria, the dressings reeking with the foulest odours until granulations had been formed and sloughs cast off. This was the case in the explosive wounds of the thigh or calf. We treated these with turpentine and olive oil swabbings, and immobilization, to prevent shreddy ends of tendon, etc., pulling up to clean tissue.

There was a large amount of tetanus at first. Later it became the routine to give a prophylactic dose of 2000 units of anti-tetanic serum to every wounded man. At first, nearly all the patients with tetanus died, but our last patient recovered, after following the latest directions of the Lister Institute.

The patient was wounded by shell fragments in the lumbar muscles (*erector spinae*) and calf of leg. He had probably not had a dose. His fragment in the leg had been removed, but that in the lumbar region was not disturbed until the symptoms appeared on the eighth day.

He then had trismus, exophthalmos, opisthotonus and spasms on drinking.

He was given 12,000 units by spinal injection on three successive days, 12,000 twice a day intravenously, and 8,000 daily intramuscularly. His *erector spinae* was partly divided, and the calf muscles cut across, to provide drainage. It was found that there were still pieces of cloth left after the operation and daily syringing.

The first effect of these large doses of serum is to make the patient much worse. General convulsions and asphyxia develope rapidly, but pass off on the following day. After ten days of daily subcutaneous injection of 4,000 units the patient recovered. Patients who had had infections of this severe type and who had been treated with small doses of about 4,000 units, had died.

Injuries to Special Regions.

Head Injuries.

Only those patients live to reach hospital who are hit by low velocity projectiles, ricochets, or grazing wounds, making gutters in the bone.

Penetrating wounds, with lodgement, are therefore common, and nearly all cases require operation sooner or later.

It is very easy to kill a patient by an operation, for there is so much traumatic œdema present in the brain that if the dura is torn, or opened by the surgeon, there is a great tendency for hernia and septic encephalitis to develope. When possible, the operation should be postponed until the œdema has subsided, or the wound healed and the scalp has become practically an aseptic field. If this cannot be done, a tiny hole should be made in the dura, at the requisite point, for the removal of the bullet or bone, and then the cranial tension should be reduced by removing much bone under the flap and half the cranium on the opposite side of the head as well.

There is very little meningitis; death is always due to encephalitis, with an abscess which bursts into the ventricle. One case of gas infection of the brain, and another of the cord exposed by a sacral injury, have been observed.

The worst case to become infected is the gutter fracture. These gutters are, as a rule, long, wide, sloughy, stinking wounds, with a cellulitic infiltration of the scalp all round, a fracture of the inner table, extra-dural hæmorrhage and much cerebral œdema. The dura is so frequently torn that hernia developes very frequently. An operation is, nevertheless, necessary, on account of pressure signs. The only thing to do is to perform a big, contralateral decompression, and remove as much bone as possible on both sides, so that the hernia does not become strangulated. This has given good results; if the dura must be opened, it must be very widely opened, after the fullest precautions to get that part of the operation clean, have been taken. An osteoplastic flap operation offers the best chances of getting a clean *dura mater*.

Chest Injuries.

It is almost the rule in injuries below the third or fourth rib to get a copious hæmothorax, the source of the bleeding being from the chest wall. It is sometimes a pneumohæmothorax. Infection occurs in a certain proportion of cases, but, as a rule, the onset is delayed, so that the first week the patient should be kept at rest in bed, and aspiration should be employed if the distress is very severe. The infection reveals itself by an increase in the amount of the fluid in the chest. In many of the patients the temperature was raised prior to this, and the fever became considerably more marked on the formation of pus. The majority were operated upon while the blood was still in the changing state:

buffy in colour and full of leucocytes. We concluded that cases of very copious hæmothorax did best when an operation was performed; about the seventh or eighth day seemed the best time, but our best functional results were in cases in which the infection produced by the projectile was present from the beginning and was associated with stinking empyemata, necessitating an operation on the second or third day. These lesions healed up with perfect result. The cases operated upon late were left with contracted lungs bound down, with organizing clot and large pyo-pneumothorax cavities, which will require Estlander operation at a later date. Vast quantities of digesting fibrin were seen to come out of the operation wound during the later dressings in these cases. At other hospitals, objection has been raised to early operation, on the ground that it would probably lead to repeated bleeding, but we tried it in several cases with good results when we thought that sepsis might develope later. The worst results were in the mild anaeorbic infections, requiring operation 10 to 20 days after the injury, not enough pyogenic infection to digest away the fibrin binding down the lung, and a pneumothorax, due to the gas produced by the organism, which had compressed the lung for several days before the operation.

Abdominal Cases.

There were very few abdominal cases, and, in the majority of lesions were residual abscesses between coils of gut. They were old cases, sent down after being kept in the field. The new bullet slashes or tears such large holes in the gut that only small shell fragments are compatible with recovery in modern abdominal wounds, involving the intestines. The only treatment in early cases is large doses of morphine, to allow limiting adhesions to form. In some cases, intestinal fistulæ were met with, and in one a mesorectal abscess. One patient, shot in the right shoulder and with a right basal pneumonia, passed a large lump of shell *per rectum*. It probably entered the hepatic flexure without entering the peritoneal cavity.

In another patient two large fragments entered the abdomen in the gall-bladder region, ploughed down through the space of Retzius and came to rest on the outer and posterior side of the left thigh. No injury of the peritoneum, bladder or sciatic nerve resulted.

Murphy's operation is freely recommended. This consists of supra-pubic drainage into the pelvis, by means of a large bore rubber tube. The patient is kept in Fowler's position for several days. Early radical laparotomy and excision of the damaged intestine, with immediate anastomosis, was tried at the English Hospital at Furnes. Good results were obtained, but it appears that this treatment has not been carried out elsewhere.

Injuries to Bones of Limbs.

These formed the majority of cases that required some operation. An X-ray examination was always taken to ascertain the number and size of the fragments. The wounds were enlarged, loose pieces removed, the marrow space drained by a tube passed through from the exit to the entrance wounds, and the limb put up in an extension frame-splint. The tube can often be removed on the following day if the track is a good, clear one, and if all the loose pieces are removed healing and union may take place in a few weeks. By loose pieces one means small fragments the size of a pea or less, completely free and scattered through the exit track as secondary projectiles. There are always some long splinters running along the shaft, and not much separated from it. These may be saved, as they are capable of living. The cases treated in this way do better than those in which there is only a typical, tiny entrance and exit wound, and a mild butterfly-type fracture without drainage. The latter are often associated with fever for weeks, and unite slowly. Often the X-ray picture shows that a segment of bone has dissolved into a fine cloud of bone dust.

Healing may follow if the large, devitalized cavity is well drained and syringed out, but the marrow cavity of the separated ends is more or less infected, and in the cases sent to England there was still a purulent discharge and a large gap, which will require grafting later. Local shock is frequently seen in this type of injury. Some cases of serious secondary hæmorrhage have occurred, probably resulting from the wounding of the vessels by minute splinters.

Fractures of the femur, with large, posterior wounds, were our bugbear at first. We tried plaster of Paris, with interruptions bridged by bands of curved iron. This answered well in hot weather, when the plaster set well, but the limb soon shrank in them, and the casing ceased to fit. Then Hodgen's splints were tried, and, finally, Sir Alex. MacCormick introduced to the Base the famous Thomas's knee splint method, with extension to the bottom bar. This proved so useful that it was quickly adapted to the upper limb, and the splint maker to the Base, Mr. Sampson, made a splint with chest piece, to prevent the ring compressing the axillary vessels, and with a loop providing for extension to the elbow.

For transport, fractures of the humerus came to be treated with Capt. Clarke's simple splint. By means of the Thomas's splint, we were able to send back in comfort men with gaps in their femoral bones of three or four inches, ready to have grafting operations performed at a later date.

The small bones of the hands and feet seemed to dissolve into sand when struck. The hand or foot would be greatly swollen with blood. This was treated by incision and hypertonic saline baths.

In making openings in the limbs for drainage, it is found best to cut across muscle rather than along it; for example, the femur cannot be well drained by incisions alongside the hamstring muscles. This has been tried often enough, but the drainage has not been perfect when required for any time. Col. Burchard showed us how well the femur was drained when one of the muscles was cut right across.

Amputations.

There is only one way, we found, to ensure quick recovery, and no danger from cellulitis or secondary

hæmorrhage. That is the guillotine operation. The limb is cut off by a circular operation, made low enough to avoid cutting the bone, since the fracture is utilized as the site for removal. No flaps are formed, but, nevertheless, the raw area left in four or five days was smaller than after a flap operation, which so often broke down and led to sepsis and hæmorrhage. I do not think that we lost a patient after starting this type of amputation. Before its introduction some fearful examples were sent down to us from the front, and many of our own patients died as well. I must recommend this type to anyone doing an amputation for senile gangrene or diabetes.

Injuries to the Jaw, Eye and Ear.

Injuries involving fracture of the jaw bones, particularly the mandible, were very liable to recurrent hæmorrhage. They were also dangerous, owing to the bronchitis which sometimes set in. The bleeding only stopped when the bones were wired, and sometimes then a main trunk had to be tied as well. Owing to the brittleness of the mandible, the final result of many of these wounds will be that only the descending rami of the bone are left, sticking forwards into the palate. It may be necessary to remove them later.

Eye.—Foreign bodies were generally non-magnetic, and usually led to loss of the eye-ball. In the presence of orbital cellulitis, Colonel Lister recommended leaving a fringe of the sclerotic attached like a mushroom to the optic nerve, which was thus protected by the cleaned up *lamina cribrosa*.

Punctured wounds of the temporal bone were not uncommon, and sometimes required operations resembling those for acute mastoiditis or labyrinthitis.

Antisepsis.

I see the subject of antisepsis and the "return to Lister" has been dealt with in the medical journals. The final result of all our trials is this: Secure asepsis, and treat wounds aseptically, by means of using antiseptics for your instruments, gloves and basins and material. The lotions used were nearly always H_2O_2 (weak) strong saline at first, when only tap water or worse was available, weak lysol for bathing the wounds with, and for dressings an antiseptic was necessary to prevent putrefaction. This was always used in the shape of bicyanide gauze, soaked with 1% carbolic. When the skin had iodine on it, this formed a blistering reagent from the mercury combining with the iodine; we therefore used methylated spirit instead of iodine. Turpentine was used at times for stinking, explosive wounds.

Joint Injuries.

We had some good results with joint injuries; sometimes a perfect recovery after removal of a foreign body from the cavity of a large joint. When there was an accompanying fracture, the results were not good, the septic osteomyelitis overshadowing the joint infection. The best treatment seemed to be to lay the joint widely open and to irrigate freely for several days. The final results in these septic arthritides will probably not be good as regards function, but many of the patients will have useful but ankylosed limbs.

A CONTRIBUTION TO THE STUDY OF FEVER.

By **Judah Leon Jona, D.Sc. (Adel.), M.D., B.S. (Melb.)**
(Formerly Beit Memorial Fellow, Lister Institute, London), Melbourne.

The following short account is a resumé of a research which I commenced at the Lister Institute, London, in 1912, and which I am following up at the Physiological Laboratory, Melbourne University. A full account of the experiments is in course of publication, but it was thought that the results obtained were of sufficient general interest to the general practitioner to justify this publication of some of the results obtained.

The experiments were mainly performed on rabbits, and the fever-producing material was obtained in the form of a powder from *bacillus coli communis*. I may mention that this fever producing material (called, for short, *pyrogen*) may be obtained from various bacteria and vegetable and animal tissues. A full account is contained in the original paper. The powder used in the majority of the experiments performed was prepared from *bacillus coli communis*, and contained 3.8% of dry bacterial body. The dose to be injected was dissolved in 1 or 2 c.cm. sterilized Ringer's solution, and was injected intravenously as a rule. Ringer's solution was used throughout as the medium in which the pyrogen was dissolved, as the injection of pure water has a disturbing effect on the temperature of the body. When ordinary sterilized water is injected intravenously into rabbits (injection dose from 1 in 200 of body weight, *i.e.*, 10 c.cm. to a rabbit of 2,000 gm. weight), there is usually a short, febrile reaction, whereas the injection of pure sterile distilled water, carefully distilled from glass (after the whole apparatus has been thoroughly cleaned out with cleaning fluid—potassium bichromate and sulphuric acid) produces, not a rise, but a fall in the body temperature (Hort and Penfold). When this water is contaminated to varying degrees with some varieties of live or killed bacterial cultures, the fall is replaced by a plateau, and with greater additions by a rise, while with large additions of the same organisms, there is a marked fall in temperature (sometimes preceded by a small rise) ending in death in many cases.

Effect of Dosage.

A number of experiments were performed to determine the relationship, if any, existing between the dose of bacterial material injected and the degree of bodily reaction. It was found that, with minimal doses, a rise in temperature is produced, which reaches its maximum in one to two hours; this is quickly followed by a return to normal. The effect increases with an increase in dose to a certain point. A further increase of the dose calls forth a response in the form of a "notched" temperature, *i.e.*, after a single dose the temperature rises, then falls to or below normal and then rises again, sometimes as high as or higher than the first rise, and, lastly, falls to normal. With larger doses the temperature falls (sometimes after a slight rise), and the death of the animal occurs in an hour, when a sufficiently large dose is given. It will thus be seen that a substance can be obtained from *b. coli* which, on injec-

tion in a minimal amount of Ringer's solution, will induce fever or collapse, according to the dose given. A dose equivalent to 0.000004 gm. of bacterial body produces fever, and 0.002 gm. producing marked collapse, or even death. Since the greater part of the weight of the bacteria is something else than pyrogen, the toxicity of the active substance must be of a very high order.

General Effect on Animals of a Single Dose.

The animals reacted to the injection of the pyrogen, either with a temporary pyrexia or a collapse. They showed general signs, as well as an effect on the temperature; quietness, lethargy, torpor, sometimes weakness in the legs, and even, in some cases, inability to stand. More or less marked diarrhœa generally followed in an hour or so, and sometimes even the passage of blood by the rectum; this could not be entirely accounted for by frequent insertions of the thermometer into the rectum. The exact time relations differed in different animals and with different doses. Generally, some effect was noticeable within an hour, and usually the animal was apparently quite normal again in six or seven hours. In some, however, the effects lasted considerably longer.

Multiple Doses.

On giving a series of minimal doses (*i.e.*, doses which will produce a small, not the maximum effect), the temperature is seen to rise after each injection by steps to a point which may be regarded as the maximal response. It then begins to fall to normal, in spite of the second injection of a previously effective dose, which previous experiment had shown to be about the optimum for a "spike" temperature. On the other hand, if the injection be repeated when the animal has again returned to normal, a rise of temperature is obtained again. Many animals, however, showed marked irregularities and abnormalities of temperature for several days after an injection.

Mechanism of the Fever Reaction.

Experiments showed that the pyrexia after injection of pyrogen was due to a cutting down of heat-loss, heat-production remaining fairly stationary. In collapse there was a lowering of heat-production, associated with a secondary constriction of skin vessels. The animal economy strives to diminish loss as far as possible, and tries to maintain the body temperature at its normal level.

Nature of the Fever-Producing Body.

Broth cultures of *b. coli* contain pyrogen, though in relatively small quantities. Similarly, the washings of emulsions of this organism are also pyrogenetic, although the washings were found to be bacteria-free by microscopical examination. Bacterial pyrogen resists boiling. When kept in the form of a paste or in solution exposed to the air, the pyrogen of *b. typhosus* gradually diminishes in power, so that a 24-hour culture is more potent than a 3-day culture. When kept dry, in powder form, the power of pyrogen of *b. coli* to induce fever (or, in large doses, collapse) is maintained for six months or longer. Drying on the water-bath was found to produce no obvious diminution in potency. It is insoluble in absolute alcohol. It is insoluble in dry ether, but a wet-ether extract produced a moderate pyretic effect. When a moderately strong solution was filtered through a 7% collodion filter (made by soaking filter papers in a 7% solution of collodion in glacial acetic acid, and washing out the acid in running water) at a pressure of 30 lbs. to the square inch, no detectable pyrogen passed the filter. When a fairly strong solution was filtered, a trace, equivalent to about $^{1}/_{1000}$ the original amount of pyrogen, passed through the filter. With a view to determining the chemical nature of the body responsible for the rise in body temperature, the filtrate obtained by filtration of a strong solution of the pyrogen through a collodion filter was examined, and the tests indicated that the pyrogenic material was not colloidal (though probably adherent to colloids, from which it is separable by the collodion filter), and was probably of the nature of an amine or amino-acid of the fatty acid series. The ptomaines, as pointed out by Brieger many years ago, have a somewhat similar chemical constitution to these bodies, and more recently Bertrand and Berthelot have found it possible to isolate from the normal human intestinal tract micro-organisms capable of producing a very active base (*viz.*, *β-imidoazolethylamine*) from histidine, of which 50 mgm. (0.05 gm.) per kilo. body weight causes death in a few minutes in a guinea-pig, and in monkeys cause diarrhœa, vomiting, salivation, and respiratory impediment.

It is quite possible that, in the case of burns to the body, substances of a similar nature to bacterial pyrogen are set free in the body, and give rise to the fever seen in milder cases and the collapse seen in severe cases. It has been shown by Heyde (1911) that in cases of severe burning there are demonstrable in the urine bodies of a nature similar to the putrefactive amines of the human body. A few experiments in the present research undertaken on this point are of interest. They indicate that when muscle is heated to 200° C. one or more bodies are liberated, which exert an action similar to that produced by injecting a bacterial emulsion. This result was not obtained by injection of a solution of skin which had been subjected to a temperature of 200° C., nor was the effect obtained by injecting muscle or skin which had been heated to 100° C. and 150° C.

The sudden fever and collapse seen in cases where an abscess bursts into the peritoneal or pleural cavity is clearly attributable to the rapid absorption of bodies contained in the pus or *liquor puris*, or both, and which had previously been kept out of the body by the wall of the abscess.

The non-septic rise in temperature, which is often seen early in cases of simple fracture, with a great deal of effusion, in the first 12 hours of the puerperium, in cases of profuse internal hæmorrhage, and after the majority of major operations associated with a greater or lesser degree of tissue destruction, can be quite easily understood to be due to the entry into the blood-stream of the products of cell-disintegration, some of which of an amino-acid nature act in the same way as bacterial pyrogen.

The fact that calcium forms an inert salt with substances of the nature of the bodies discussed above may be of value clinically, but so far a few

experiments only have been performed, and no clear result is yet forthcoming.

A point of interest is the pyretic response to alterations in dosage. Here we see, in response to increase in dosage of pyrogen beyond a certain point, an actual diminution in the degree of pyrexia produced; when a certain dose is given, no pyrexia whatever results, while the animal responds to a still larger dose, with a subnormal temperature. This kind of phenomenon is met with clinically every day, and is at first sight puzzling. In many epidemics of infectious diseases, cases often occur, showing a high body temperature, with perhaps no other signs of intoxication, while in other cases, the patients are manifestly very ill, yet the temperature is either normal or perhaps subnormal. The response of an old animal with a subnormal temperature to a dose of pyrogen which, in a younger animal, would give a sharp rise in temperature, is met with clinically in the human being in many diseases, *e.g.*, the afebrile pneumonia of old people.

The application of many of these facts to practical problems throws light on the mode of action of some of the remedies and methods of treatment used in practice. For example, the fact that pyrexia is due, not to an over-production of heat in the body, but to diminished loss indicates as treatment increase in heat loss. This is most efficiently brought about in the majority of cases by sponging or bathing, or by free action of bowels and skin, induced by physical or chemical means. The so-called antipyretics commonly used, antipyrin and allies and quinine, act by increasing heat loss, while quinine also diminishes heat production (Loewi).

We have no well-defined means of neutralizing the pyrogen actually in the body in a case of fever, but there seems to be evidence accumulating that the injection of normal horse serum or some antitoxic serum brings the temperature to normal, and very often relieves the local condition in some inflammatory affections. Even the administration of raw beef juice in large quantities by the mouth seems to exert a very favourable action in these cases. Whether this action is due to the action of the various oxidizing agents of serum, such as the oxidizing ferments, or to an absorption of the pyrogen by the colloids (proteins) of the serum can only be guessed at at present, but it is hoped that further experiments at present in progress will throw light on this point.

The "wet-pack" method of treating suppurating or extensively abraded surfaces is one that meets with general approval. It is certainly very suggestive that this wet treatment in these cases is superior to dry treatment. It would seem that the solution of air gases in the wet dressing plays some part in the treatment. I have found a great improvement by soaking the packs, not in watery or saline lotion, but in a solution of hydrogen peroxide. Only recently I was most agreeably surprised at the rapid clearing up and healing, with practical absence of general symptoms, of an extensive abscess of the breast, in an old lady of over 70 years, involving the whole breast, after it had been opened and syringed out at intervals with a solution of hydrogen peroxide, and application of wet packs soaked in the same solution. The use of oxygen, hydrogen peroxide, or other oxidizing agent, has also been found serviceable by other surgeons in the treatment of septic conditions.

The method of applying packs soaked in a solution of lead acetate, which is recommended by Bickle for the treatment of extensve burns of all grades, and has been found to be of such value, particularly in the prevention of general symptoms, falls in line with the other general considerations above stated.

There is not sufficient evidence to indicate whether the collapse seen after prolonged anæsthesia is due in part to hæmolysis by the solution of the anæsthetic in the blood. Were this the case, it would be related to the collapse and drop in temperature seen after injections of pure distilled water in rabbits. To obviate the ill-effects, washing out from the blood of the products responsible for the condition might be suggested. The rectal injections of saline solution found so beneficial in these cases possibly have this eliminating action, as well as the one generally ascribed, namely, of filling of the relaxed splanchnic vessels. Personally, I have always regarded the latter explanation as rather far-fetched, as there does not seem to be any clear physiological foundation for it.

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Reports of Cases.

CASE OF PITUITARY CYST: DEATH FROM ADRENAL HÆMORRHAGE.

By **J. Catarinich, M.B., Ch.B.,**

Acting Medical Superintendent, Hospital for Insane, Beechworth, Victoria.

Patient, M.S., æt. 53, was admitted to the Receiving House, Royal Park, on December 15, 1914, as a case of melancholia. She was then in an agitated state, expressing delusions of a hypochondriacal nature, and was actively suicidal. She imagined she suffered from cancer (her husband died of it), that her bowels were stopped up, and that her hands and body were wasting away. She was noisy, restless, troublesome, apprehensive of impending injury, seeking every opportunity of strangling herself, and suffered much from insomnia.

Some six weeks prior to her admission she developed a paralytic squint in the left eye, which persisted until the the time of her death. She complained of violent headache, mainly occipital, and at times, probably impelled by the aching pain, she attempted to smash the back of her head against posts, walls, or anything handy. Vomiting was not present at any time. Her discs were normal. The Wassermann test was negative. Her urine was free from ordinary

pathological constituents. The blood pressure appeared raised to the examining finger, but no manometric reading was taken.

The condition varied but little during her residence in the Hospital for Insane. Actuated by her delusions, she occasionally refused food. Screaming bouts were frequent, and she continued very subject to insomnia. She continuously complained of intense headache. Her mentality gradually became less acute, but sharp questioning always elicited a rational reply, except, of course, when her delusions obtruded. Early in August last her health appeared less satisfactory, but physical examination showed nothing to account for it. She was up and about daily until August 17. She went to bed as usual on that night, and at about 6.50 a.m. next day, while still in bed, she expired unexpectedly. Prior to death, there was a slight hæmorrhage from the rectum.

Nine hours after death I made a *post mortem* examination. The heart was small, and had stopped in systole. There was fine atheroma in the sinuses of Valsalva, and in the ascending aorta numerous small areas of pin-head size. There was a little, old-standing pleurisy at the left base (probably accounting for the illness early in August). The liver was congested and greasy on section. The kidneys showed stellate vens in the cortices. Both adrenals were much larger than usual, and there was hæmorrhage into and around their substance. The uterus was retroverted. A small, sub-peritoneal myoma, about the size of a pea, was present. In the alimentary canal no abnormality was discovered to account for hæmorrhage *ante mortem*, and there was no free blood in the lumen. At this time I was unaware of Friedman's experiments, which were published later. Repeated injection of adrenalin produces lesions of the duodenum in animals. I did not examine the duodenal area, and concluded that the hæmorrhage was probably of hæmorrhoidal nature.

There was no brain abnormality macroscopically, other than enlargement of the pituitary body, and of the *sella turcica*. The increase of size of the pituitary was due to a cyst in its anterior lobe, containing clear fluid, which escaped in the removal of the part. The pituitary was about the size of a cherry, and the strabismus was probably due to the pressure exerted on the sixth nerve in the cavernous sinus. There were no other symptoms due to such pressure, but the free anastomoses present here is, I think, sufficient to explain their absence.

Dr. W. A. T. Lind, Pathologist to the Lunacy Department, reported on the pituitary as follows: "The increase in the size of the gland was due entirely to the cyst, which was bilocular and empty. There were areas of atrophic glandular tissue in the anterior lobe, quite apart from the variability of the granule content of the cells met with in that region. There was very little colloid in any of the sections. The *pars intermedia* showed very little evidence of it, and the posterior lobe also showed lack of it. Except for inactivity, nothing else pathological appears."

The combination of pathological findings is undoubtedly rare, and offers much food for theory and research. It is not my intention to offer comment here beyond this; that this case, with the evidence of pituitary disease in a few isolated instances, has done much to strengthen an increasing conviction that in many cases of manic depressive insanity, the symptom complex is due to derangement of the internal secretions, particularly of those organs known as the ductless glands.

Reviews.

BONE SURGERY.

The April and June numbers of Murphy's Clinics[2] each contain a great deal of most useful and interesting matter. The first fifty pages of the April number are devoted to the subject of acute osteomyelitis, a disease which requires quite as much promptitude in diagnosis and treatment as acute appendicitis, although it is not often dealt with in the same adequate manner as appendicitis. Murphy is doing good service in directing attention to this important and often calamitous disease. The article will bear reading twice. Another good article in the same number is a clinical lecture by W. L. Rodman, on carcinoma of the breast. In this will be found a description of chronic cystic mastitis, with particular reference to its connexion with malignant disease, demonstrating how dangerous the condition is. He also refers to papillary cystadenoma, and to Paget's disease, and agrees with Murphy that the latter is really a manifestation of duct cancer, and is cancerous *ab initio*. Papillary cystadenoma he regards as an indication for immediate and radical extirpation of breast and glands. He concludes with a description of his method of operating in malignant disease of the breast. In the June number, the first 58 pages are devoted to injuries of the carpal bones, which have assumed so much importance since examination of injuries by X-rays has become a routine practice. A comparison of the older editions of works on fractures and dislocations with the latest ones reveals the progress that has been made. In two distinct places, on page 396 and again on page 411, the semilunar bone is referred to as the "navicular," as if it were a synonym, whereas, of course, the fact is that "navicular" is merely the Latin synonym for the Greek "scaphoid," and means exactly the same. We note that in the description of an open operation for removal of the semilunar bone there is room for a little more careful editing. Read this: "I am slipping my finger up underneath the tendons into the space which the semilunar formerly occupied. Note that the tip of my finger will no longer fit into this space, which has been extensively encroached on by the cuneiform, os magnum, and scaphoid. . . . . The semilunar is now completely excised. . . . . Note that we carried out all our operative procedures without touching the wound with our gloved fingers or with any part of the instruments which had touched our fingers." Murphy is, like other surgeons, human, and fallible! Another very good article in the June number is one on "Painful Exostosis of the Os Calcis." The subject has received a good deal of attention of late years, in connexion with chronic bursitis, and it will repay further study. Murphy has a very good case to describe, and he discusses it very fully. In another article on "Chronic Tendovaginitis of the Thumb," he refers to ganglion as synonymous with chronic tenosynovitis. Will he not find, on further enquiry, that this is going a little beyond the evidence?

[2] The Clinics of John B. Murphy, M.D., Vol. IV., Nos. 2 and 3, April, 1915. Philadelphia and London: W. B. Saunders Company; Melbourne: James Little; demi 8vo., pp. 382 and 577 respectively. Price, 35s. per annum.

TOBACCO FUND.

The last European mail received in Australia contained a certain number of postcards from the boys at the front, thanking subscribers for the gifts of tobacco and cigarettes, and asking for more. We have not received any contributions for a considerable time, until a day or two ago, when a generous donor revived our fund. We hope that her example will be followed by others.

	£	s.	d.
Amount previously acknowledged	31	11	7
Miss A. L. Whitfield, Sydney	0	4	0
Total	£31	15	7

THE OFFICE OF CHIEF HEALTH OFFICER OF TASMANIA.

Our attention has been drawn to a statement which appeared in *The Medical Journal of Australia*, December 18, 1915, p. 585, to the effect that the position of Chief Health Officer of Tasmania had not been filled, because none of the applicants possessed that Diploma of Public Health which was regarded as essential. It appears, however, that the statement is incorrect, inasmuch as one applicant possessed the D.P.H. of the Royal College of Surgeons and Physicians of Ireland, and the degree of B.Sc. in the Department of Public Health of the University of Glasgow.

The Medical Journal of Australia.

SATURDAY, JANUARY 22, 1916.

Who Shall Go?

For a considerable time, the Department for Defence has been regarding with some anxiety the problem of finding a sufficient number of medical officers for the pressing needs of the near future. The requirements in respect to the new army of 50,000 do not appear to be exactly determined up to the present. When it has been decided what base, stationary or intermediate hospitals will be supplied, it will be possible to speak definitely of the numbers of the practitioners to be included in the drafts. We learn that the Department is being requested to draw up a programme of its requirements, and to define the duties to be undertaken by each medical officer sought. But even in the absence of this exact information, it is possible to form a fairly accurate estimate of the needs, and to indicate more or less the extent of the sacrifice required of the profession within the Commonwealth.

Before attempting to indicate the position, it is necessary to make reference to an important recommendation which the Deans of the three Faculties of Medicine have submitted to the military authority. We are informed that the Department for Defence requested the Deans to consider what arrangements could be made to increase the number of graduates available for the Australian Army Medical Service with the Australian Imperial Forces. They start their estimate of the present position by giving the number of medical practitioners who have already gone on active service as approximately 800. This represents nearly 33% of the total strength of the profession. In the next place, they assess the immediate needs of the Department at about 245 men. The proposals put forward include the liberation of medical officers of military age and fitness at present serving in the various departmental offices, camps and hospitals. It is anticipated that at least 50 officers could be replaced by men beyond the military age or by men who are not physically fit for active service abroad. The substitutes for the men joining the forces would be men in practice. In the second place, it is anticipated that a further 50 men could be recruited from the resident staffs of the various civil hospitals throughout the Commonwealth. Newly qualified graduates are suggested to fill the posts of some, at all events, of these 50 men. In the third place, there will be 25 new graduates available in March next. This number is estimated in addition to those freshly qualified men who would be required to fill the resident positions in the civil hospitals. In the last place, the Deans suggest that 70 general practitioners could be persuaded to relinquish their practices to join the colours. This would account for 195. In addition, they suggest that the Defence Department could transfer medical officers from Egypt and other Mediterranean bases, where the number appears to be in excess of the needs. While they admit that they have no means of estimating the surplus of medical officers, they assume that the Department could secure 50 men for this purpose, thus bringing the total up to 245. The estimate given for later reinforcements is also of importance. In June next, 12 students should pass their examinations in the Adelaide University, while in August next, 35 should pass in Sydney and 25 in Melbourne. This would yield 72 additional men.

The Department is obviously justified in regarding the situation with some misgivings, since the supply of freshly qualified graduates during the next few months will not exceed 140, and the available men within the six States is distinctly limited. Regimental medical officers will be required for the new army. It is probable that 100 men will be required for this duty. The type of man best suited for work in the trenches is a young, energetic but not necessarily experienced graduate. The greater part of his duties will comprise of first-aid work, and the qualifications, in addition to medical knowledge, are physical endurance and Australian pluck. It is obviously useless to appeal to men of mature experience to volunteer for this service. The proposals of the three Deans are excellent in every particular. On the other hand, it might be wise to substitute a modification for the drafting of 50 freshly qualified graduates to replace the resi-

dents at the civil hospitals. If 75 fresh graduates could be available for regimental work not later than March, there would be the need of finding a further 25 young men to make up the full complement. Lieutenant-Colonel Gordon Craig's scheme to utilize the information placed at the disposal of the British Medical Association should solve this difficulty. We have no doubt that the 25 men could be obtained partly from among the junior residents of civil hospitals and partly from among the junior members of the profession still unattached; the places of those going to the front could be filled by younger practitioners, who are prepared to lend their aid during the time of need.

Men will also be required for field ambulances. Here again the officers should be young, and although more experience is required than is the case for regimental officers, any keen practitioner, who has held a hospital appointment, should make an excellent officer.

The same class of men would be required for reinforcements, and, in view of the probability that a considerable number will be required for these three units of the medical services, it is hoped that as many practitioners under the age of 35 years as possible will intimate to their respective Branches of the Association that they are prepared to take up the work required of them. In the case of performing a duty to the Empire, medical men will not hesitate to sink ambition, desire to do congenial work or inclination to make money for the time. Australia is in need of young men's services, and we are convinced that the aim of every one will be to assist in bringing the war to a satisfactory and honourable termination, with as little loss to our troops as possible.

In the next place, we hear of new base or intermediary hospitals. Hospital ships, too, must be equipped, and in these units men of up to 40 years or perhaps a little older can be utilized. The work is primarily the work of military service. When a medical man volunteers for service, he becomes a soldier, and must be prepared to do a soldier's duty. True, the members of the Army Medical Corps are non-combatant, but nevertheless they must be prepared to be a number in a disciplined army. For this reason, younger men are better adapted to the requirements than older men. We have not the least hesitation in stating that the medical profession can supply as many men as are required for these units. The Defence Department can determine the number, and the only condition that will be fixed is that during the periods of activity the men will find ample occupation. The Deans estimate 70 practitioners in addition to those men now serving with the Australian Army Medical Corps Reserve or in some other branch of the Defence Department. Were twice this number required, we feel sure the men would come forward. The more serious problem, in so far as this draining of the profession is concerned, is that connected with the medical care of the home population in Australia. Careful organization, Lieutenant-Colonel Gordon Craig's scheme, and the good will of the whole profession should lead to a solution.

To sum up the position as it appears to us, we would say that as soon as the Department for Defence can tell the British Medical Association exactly what number and type of men are required, the work of organization will proceed without flaw. The individual members should ask themselves: What part can I play in this great game? There is work to do at home and abroad, and the reply to the question: Who shall go? must be sought in the valuable records collated by the six Branches of the British Medical Association.

MEDICAL TREATMENT OF SCHOOL CHILDREN.

The determination of the New South Wales Branch to oppose the institution of a State Service for the purpose of providing treatment of school children and others is based on two well founded reasons (see page 82). In the first place, the public must be able to command the best form of medical treatment, and in the second the relations between the medical practitioner and the public must not be disturbed by the intervention of a Governmental Department. It has long been recognized by the British Medical Association in all parts of the Empire that there are two distinct problems connected with the health of school children. The first is the detection of defects. It is quite obvious that if parental responsibility is to be maintained and if the school authority is to discharge its educa-

tional obligations, a control of the health of the children must be kept by that authority. If the authority can discover defects, which might imperil the well-being of the child or impede its education, the parents must be warned of the necessity of having remedies effected. Medical inspection is therefore essential as a duty of the education authority. The second problem is the application of remedies for the defects discovered at the inspection. Whatever plan is adopted for carrying this into effect, it must be kept distinct from the work of inspection. In order that the children may derive the full benefit of the control of their state of body and mind, it is necessary that some provision should be made whereby the remedy may be placed within the reach of every parent. The inspection reveals defects which, without it, would go undetected and therefore uncorrected. In the case of persons in affluence, no special provision is required. The parent is informed that his child is suffering from a condition which requires treatment, and the full responsibility for finding someone to carry this out rests with him. No State department has the right to disturb this arrangement, which is rational, natural and ethical. There are, however, parents who cannot afford to pay a doctor fees for ordinary attendance. In Australia, a large proportion of these persons belong to some Lodge, and, through this agency, the treatment should be sought. Should the parent not be a member of a Friendly Society Lodge, special arrangements should be made with hospitals, in order that the treatment may be available. The Department of Education proposes to establish a service of salaried practitioners, who would be required to attend rich and poor alike. This form of State Medical Service is so antagonistic to the public interest that, were it adopted, it would certainly lead to an ultimate deterioration of the national health. The State, in its plans for a nationalized medical profession, aims at cheap medical attendance. Competent practitioners have no need to accept a small salary, and it is quite certain that they will not sell their independence for a pittance. This proposal may, therefore, be dismissed without further ado.

It has been the practice in the past to refer school children to public hospitals for treatment of those defects, which are sought for at the medical inspection. The equipment of these institutions and the fact that in each Department there are medical officers specially trained in the various branches of medicine render this practice of great value. It is quite unnecessary to devise any special plan for the carrying out of this work, if proper arrangements are made with the hospitals. The defects of skin, hair, eyes, ears, nose and throat and the like can and should be dealt with by private practitioners, when the parents are in a position to pay, by Lodge practitioners, when the parents are members of Friendly Society Lodges, or in public hospitals, when the parents are unable to obtain the services of either of the former.

VACCINATION AGAINST PNEUMONIA.

Prophylactic inoculation against disease has become the order of the day. Years have passed since the observations of Mary Wortly Montagu led the genius of Jenner to evolve protective vaccination against small-pox, with its immeasurable saving of suffering and life. Almroth Wright's great achievement in connexion with enteric fever has already resulted in the prevention of countless days of sickness and of large numbers of deaths. Haffkine and others have achieved less marked success, but, nevertheless, the prophylactic inoculation against plague, cholera, diphtheria and tetanus is a matter of practical utility of no small value. Almroth Wright has devised inoculation schemes for many other diseases. In some cases, the degree of success has not been marked. There are few who would regard the inoculation against pneumonia in a very hopeful light, although various favourable reports have been recorded. Mr. G. D. Maynard, the Statistician to the South African Institute for Medical Research, has placed on record the results of a highly interesting series of experiments in this connexion[1] It appears that two experiments have already been conducted, with the collaboration of the Chamber of Mines, but the results were suggestive rather than convincing. A third experiment was undertaken, in which no less than 55,900 native workers in the mines were utilized. One half were inoculated with a polyvalent vaccine, comprising as many of the local strains of the pneumonococcus as possible. The other half was observed as controls. The distribution of inoculated and controls in each group of natives was equal. The case-rate in the experiment was 16.4 per 1,000 among the inoculated, and 20.6 among the controls. The case mortality was practically equal. The author finds that the lower case rate is not due to errors of sampling. On further investigation he has ascertained that the incidence of pneumonia among the inoculated was considerly lower in the first month after inoculation and this lowering disappears after the fourth month.

[1] *The Medical Journal of South Africa*, September, 1915.

He is not able to determine whether two or more inoculations would increase the protection. These results worked out with accuracy indicate that protective vaccination against pneumonia has a distinct value among a population markedly disposed to the disease. During a period of four months, the attack-rate was approximately 25% less among the inoculated than among the controls. But, viewed from a practical point, it may be asked whether the advantages are sufficient to justify a wide application. In a population of nearly 56,000 the number of lives saved was 17. The protection does not last for more than four months, and it is by no means complete.

THE COMMONWEALTH BUREAU OF SCIENCE AND INDUSTRY.

The recommendations of the Committee appointed to consider the best means of carrying out the coördination of science and industry within the Commonwealth have been made public. The Minister has announced that the recommendations dealing with the appointment of an Advisory Council would be acted upon without delay, while the others would be considered at a later date.

The recommendations comprise the establishment of an Advisory Council of nine members, to be appointed by the Governor-in-Council. The members are to be representative of science and of the primary and secondary industries. Three directors are to be appointed to control and administer the Institute, and to collect information and to determine on the nature of the researches to be undertaken. One or these directors is to be selected to act as Chairman of the Directors. They are to be *ex-officio* members of the Advisory Council. The qualifications of the Directors are to be business and financial qualities, and scientific capabilities and wide experience.

The scientific staff is to be appointed by the Governor-in-Council, on the advice of the Directors.

All discoveries, inventions, etc., are to be vested in trustees, and are to be made available to the public under proper conditions and on payment of gratuities or otherwise.

Bonuses may be paid to inventors or discoverers working under the auspices of the Institute. Fees may be charged for special investigations undertaken by workers in the Institute.

In the next place, steps are to be taken to effect a coördination of the work of technical colleges and trade schools, and attention is to be paid to the study of modern languages.

The following suggestions have been made with the view of initiating work without delay, pending the development and organization of the Institute:—

(1) That until the Institute is established, an Advisory Council be appointed by the Governor-General in Council, particularly to carry out the objects expressed in resolutions 1 and 2, *viz.*, "To consider and initiate scientific researches in connexion with or for the promotion of primary or secondary industries in the Commonwealth; and (2) the collection of industrial scientific information and the formation of a bureau for its dissemination amongst those engaged in industry."

(2) That the Federal and State Munitions Committee, heads of the Commonwealth and State scientific departments and bodies (representatives of Commonwealth manufacture, commerce, agriculture, mining and engineering), the Universities and technical colleges, and private enterprises be invited to suggest branches of industrial scientific research in which investigation would be of immediate practical use to producers and manufacturers.

(3) That the Advisory Council be appointed forthwith, and that, when appointed, it immediately take steps to initiate research work into the most pressing matters needing investigation, and seek the coöperation of existing institutions, and utilize the resources of the staff and equipment at our disposal at the present time.

(4) The Committee suggests for the consideration of the Advisory Council that the following problems, among others, are pressing: The sheep fly pest; improved methods of extracting zinc from Australian ores (including the commercial manufacture of electrolytic zinc); the utilization of brown coal, with recovery of by-products; the introduction of a mechanical cotton picker; the eradication of the prickly pear; the production of aluminium and ferro alloys; the recovery of potash; the manufacture of alkali; and the condensation of sulphurous and acid gas, at present being wasted; the cultivation of useful indigenous grasses and salt bushes; the manufacture of fine chemicals, drugs, and explosives. It is, of course, impossible to predict in matter of research what the outcome of the investigations may be, and the Committee realizes that not all the above subjects can be examined to the point of final results during the interval before the Institute gets to work. The Committee, however, suggests that in many, if not all, of the above matters most valuable work could be done in collecting data and, in effect, making a preliminary census, both as to present discoveries, and the staff and apparatus available in Australia. Such work is an indispensable first step in all research. In addition to this, there is ample scope for practical work during the interval, in vigorously prosecuting the dissemination of known information as to processes, etc., amongst our producers and manufacturers.

(5) That funds be placed at the disposal of the Advisory Council for the above purposes.

Naval and Military.

We regret to note in the 133rd list of casualties, etc., published on January 17, 1916, the names of Captain J. W. Wilkinson (ill in hospital), and Captain F. N. Le Messurier.

In the District Order No. 4 of the 2nd Military District, published on 11th January, 1916, the allotment of medical officers to training areas are republished for general information.

District	Training Area. Brigade Area.	Training Area. Battalion Area.	No. of Area.	Medical Officer.	Date from which appointment and pay take effect.
2nd	4th	16	16c, Adamstown	Capt. (prov. and temp.) J. C. Douglas	1-7-14
2nd	4th	16	16c, Adamstown	Dr. F. Greaves (temp.) *vice* Capt. (prov. and temp.), J. C. Douglas	1-9-15
2nd	5th	19	19a, Hunter's Hill	Hon. Capt. L. H. Rogers (temp.).	1-9-15
2nd	10th	39	39b, Canterbury	Capt. (prov. and temp.) R. E. Woolnough	1-5-15

The following awards have been made in recognition of distinguished service during the Gallipoli campaign to members of the Australian Army Medical Corps:—

Companion of St. Michael and St. George—

Colonel T. M. Martin, O.C., 2nd Australian General Hospital.

Military Cross—

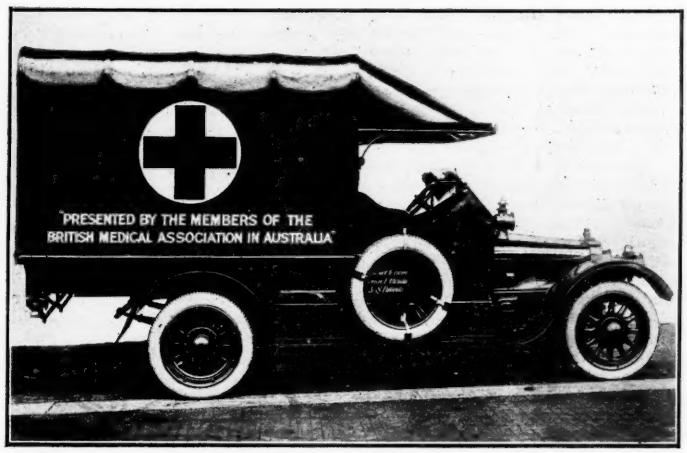
Captain James H. Anderson, 3rd Light Horse Field Ambulance.

Colonel Parkes, of the New Zealand Army Medical Corps, has been awarded the C.M.G., and Captain Guthrie the Military Cross.

DR. J. W. BARRETT'S POSITION.

It will be remembered that when the Department for Defence recalled Lieutenant-Colonel W. Ramsay Smith and Matron Bell on the recommendation of the Army Council, it was announced that Lieutenant-Colonel J. W. Barrett was to be relieved of all military duty, either in the Imperial or the Australian forces. On January 14, 1916, Mr. L. S. Amery, a Unionist Member of the House of Commons, asked the Under-Secretary for War whether Dr. J. W. Barrett had been removed without enquiry by the Australian Government on the Army Council's recommendation, which the Commander in Egypt subsequently pointed out was due to a misunderstanding; and also whether, if the Court of Enquiry's findings were favourable, the Army Council would reinstate him. Mr. Tennant stated that the hon. member's assumptions were substantially correct. The Court of Enquiry in Egypt had exonerated Dr. Barrett, and has spoken of him in the highest terms. The High Commissioner for Australia has been informed that there would be no objection to Dr. Barrett being employed in Egypt or elsewhere, provided that the Commonwealth concurred.

Senator Pearce, Minister for Defence, is reported in the public press to have announced that Lieutenant-Colonel J. Barrett should be recalled to Australia, and that the enquiry instituted by the War Office should be continued, as soon as the report had been received.



BRITISH MEDICAL ASSOCIATION (AUSTRALIA).

Military Motor Ambulance Fund.

At the suggestion of Dr. G. H. Abbott, Honorary Secretary of the Federal Committee, we are publishing a photograph of one of the two motor ambulances purchased with the money contributed to the above fund. It will be remembered that the ambulances were ordered through the Department of Defence in London.

HOSPITAL FOR THE INSANE, NEW NORFOLK.

The Annual Report of the Acting Medical Superintendent of the Hospital for the Insane, New Norfolk, Tasmania, for the year 1914-15, has been presented to both Houses of Parliament. The Acting Medical Superintendent records the death of Dr. W. H. Macfarlane, on August 2, 1915. Dr. Macfarlane was the Medical Superintendent up to the time of his death.

There were 530 patients in the Hospital on July 1, 1914. During the course of the year 48 patients were admitted for the first time, and 16 for the second or subsequent time. The period elapsing between discharge and readmission varied from 5 days to 9 years 4 months and 11 days. Of the 64 patients, 47 were admitted on Justices' orders, 12 on private orders, and 5 on the Governor's warrant. The number of patients admitted in one year since 1900 has varied between 64 (1914-15) and 99 (1911). Thirty-five patients were discharged during the year, of whom 16 were males and 19 were females. In 10 males and 9 females, recovery was registered on discharge. These numbers represent 29.68% of the total number of admissions, or 33.94% of the total number, excluding idiots and imbeciles. The largest number of recoveries during the eight periods of twelve months was 32, and the smallest 18. Eight patients were discharged relieved, and a like number unimproved. These patients were committed to their friends' care, under Section 22 of Vic. Cap 2. There were 22 deaths, of 13 males and 9 females. The length of residence of the patients who died during the year varied between 6 days and 65 years 7 months 3 days. In 17 cases the patient had been in the hospital for over one year. The causes of death in six was heart disease, in three general paralysis of the insane, in three senile decay, in two chronic brain disease, and in one each exhaustion, epilepsy, paralysis, brain paralysis, brain disease and laryngitis, influenza, general debility, and pneumonia. The case mortality works out at 3.7%.

The male patients were employed at wood-cutting, farming, gardening, and work in the kitchen, bakery and wards. The females were employed in the laundry and sewing room, and in domestic work. Work is regarded as a therapeutic agent. Fortnightly dances, a Christmas-tree party and an annual picnic, as well as the library, are the means employed for providing amusement and instruction.

The maintenance expenditure amounted to £29,228 6s. 9d., and the total revenue £5,553 9s. 10d. The cost per head per diem on the gross expenditure was 3s. 0.6d., and on the net expenditure 2s. 5.2d.

ENEMY TRADE MARKS.

In the *Commonwealth of Australia Gazette*, No. 4, dated January 12, 1916, the Attorney-General makes an official announcement in regard to the proprietors of certain trade marks who are subjects of a State at war with the King within the meaning of the Patents, Trade Marks and Designs Act, 1914-1915, and suspends these trade marks. The following is a list of the pharmaceutical substances included:—

Pharmaceutical preparations manufactured by Farbwerke vorm. Meister, Lucius und Brüning of Hoechst a.M.; *Novocain, antipyrine, migrainine, salvarsan, neosalvarsan,*

Pharmaceutical preparations manufactured by Farbenfabriken vorm. Friedrich Bayer und Co., of Elberfeld: *Aristol, aspirin, helmitol, heroin, jothion, mesotan, protargol,* and *trional.*

Pharmaceutical preparations manufactured by E. Merck, of Darmstadt, including *veronal, perhydrol, jodipin.*

Chemical substances manufactured by the Sanatogen Company of Upper Thames Street, London: *Sanatogen.*

Chemical substances manufactured by Johann Abraham von Wülfing, of Berlin: *Albulactin, cystopurin,* and *formamint.*

Disinfectants manufactured by Schülke and Mayr of Hamburg: *lysol.*

Optical instruments manufactured by Carl Zeiss, of Jena.

Abstracts from Current Medical Literature.

THERAPEUTICS.

(23) Elimination of Iodide of Potash.

W. A. Wovschin (*Journ. Amer. Med. Association*, September 25, 1915) has studied the urinary elimination of potassium iodide after oral and rectal administration. Patients of the general ward type were given 1 gm. potassium iodide, and the urine was subsequently examined to determine the total amount of iodide of potash excreted day by day until the last traces had disappeared from the urine. For comparison, the same quantity was given per rectum by proctoclysis to the same patient, and the urine treated in the same way. The technique employed was to liberate the iodine from 100 c.cm. of the urine with nitric acid containing nitrous acid, and to separate it by shaking repeatedly with chloroform. The amount of iodine in the chloroform was determined by titration with sodium thiosulphate solution, which had been previously standardized with a known solution of potassium iodide. The major part of each dose of iodide of potash is excreted in the first twenty-four hours, from 5% to 10% of the dose is given off in the second twenty-four hours, and by the third day only a trace, if any, is excreted. The amount of iodide of potash excreted in the urine was always sensibly less than that administered. Other avenues of excretion are thereby indicated. Patients with much expectoration excreted much less iodide in the urine. The elimination of iodide of potash in the urine is diminished to such an extent in cases of nephritis that the secretion of the drug might serve as a means of estimating the efficiency of the kidneys. In cases of pneumonia the elimination of iodide of potash ceased after the first twenty-four hours. Iodide of potash can be given to comatose patients by the rectum with the same results as when administered per orem. In one case a lumbar puncture was made and a trace of iodine could be found in the fluid. In two other cases it was not possible to separate any iodine from cerebrospinal fluid. The blood pressure was determined in a number of cases, but the height did not seem to be related in any way to the amount or rate of excretion by the kidney. The least quantity eliminated through the kidney was one-tenth of the dose in a case of uræmia, and the largest amount nine-tenths of the dose in a case of cancer of the bowels.

(24) Treatment of Typhoid Fever by Vaccine Administered Intravenously.

Helen I. McWilliams has collected the data concerning the treatment of enteric fever by typhoid vaccine given by intravenous injection (*Med. Record*, October, 1915). Ichikawa published in May, 1914, the results of 82 cases of enteric fever treated with a vaccine prepared by adding living typhoid bacilli to the sera of patients convalescent from typhoid fever, by washing the bacilli several times and sterilizing by the addition of three parts per thousand of carbolic acid. He found that 50% of his cases entered on the stage of convalescence by a sudden crisis, while, in other cases, the disease was appreciably shortened in its course. He considered that 89% of his cases ran a course of shorter duration than usual. Since this time the author has collected records of 587 cases treated by the intravenous injection of vaccines. In 392 of the cases the illness ran a course of less duration than usual. In the majority of these cases the illness ended abruptly by crisis. The vaccines used have varied considerably. There has been some discussion as to whether deaths have not been due to the vaccine, but no deaths have been attributed to bacilli killed by heat. Only when living bacilli have been used has the suggestion been made that death was caused by the vaccine. The author treated two cases at the Quarantine General Hospital, New York. She kept hourly records of the temperature and of the differential leucocytic count. The first patient received 500,000,000 bacilli in the form of the usual prophylactic vaccine into the median basilic vein. In thirty-five minutes the patient had a chill. The temperature rose rapidly, and reached 106.4° F. in three hours. It remained high for ten hours, and then fell in twelve hours to normal. The patient was a man, aged 27, in the ninth day of the disease. The Widal reaction was positive, and typhoid bacilli were isolated from the stools. Although the reaction was severe, the pulse was always good, and no alarm was occasioned.

(25) Treatment of Scarlatina with Blood.

A. Zingher (*Journ. Amer. Med. Association*, September, 1915) has treated twenty-three cases of scarlatina with intra-muscular injections of blood. The cases selected for treatment were chosen out of 900 cases in the Willard Parker Hospital, in which the prognosis was doubtful or bad. The injections were made with 6 to 8 oz. of blood, and they were sometimes repeated. The whole citrated blood was employed, and it was injected into the gluteal regions, into the outer sides of the thighs and into the calves. The cases were divided into two groups. Those with early toxic or malignant symptoms, showing delirium, intensive petechial rashes, severe angina and moderate glandular enlargement were treated with the pooled blood of convalescent patients. The blood was collected from time to time in quantities of two ounces and kept on ice. Those in which septic symptoms developed on the fifth to the eighth days were treated with blood from normal persons. Fifteen cases of the first type were treated, with four deaths. Recovery ensued in each of the eight cases of the second type. The number of cases is regarded as inadequate, but the record represents the results of the most satisfactory treatment that has been tried in the hospital for these severe cases. The treatment will be continued, and these preliminary conclusions have been published to encourage a further trial of the procedure in other hospitals.

(26) The Internal Treatment of Yaws.

Aldo Castellani (*Journ. of Trop. Med. and Hygiene*, March 15, 1915) recommends an internal remedy for yaws, for use in certain cases. He considers that salvarsan and neo-salvarsan are without doubt the specific drugs for the treatment of yaws. When, however, for any reason, such as the shortage of the specific drugs, the absence of properly qualified medical men in the infected districts, refusal of the patients to be injected, an internal remedy is desirable, he has used the following mixture with success, especially in recent cases. The mixture contains tartar emetic, 1 gr.; sod, salicyl., 10 gr.; potass. iodid., 1 dr.; sod. bicarb., 15 gr.; made up to 1 oz. with water. Three doses are given daily. The mixture is diluted with four volumes of water before administration. The active drugs in the mixture are the iodide, and, to a less degree, the antimonial salt. The salicylate hastens the disappearance of the crusts. The presence of the large amount of bicarbonate of soda apparently prevents the symptoms of iodism and decreases the emetic properties of the mixture, so that it is possible to administer massive doses of potassium iodide and tartar emetic. In his experience, the use of other drugs as mercury and the inorganic preparations of arsenic is without therapeutic action.

(27) The Treatment of Pernicious Anæmia.

A. M. Gossage (*Medical Chronicle*, April, 1915) discusses the treatment of cases of pernicious anæmia, and records the histories of four patients to whom neo-salvarsan had been administered. He finds that the intramuscular injection of neo-salvarsan affords a method of treatment for pernicious anæmia by means of which improvement is likely to be more rapid and to be maintained for a longer period than was the case with the administration of arsenic by the mouth. It seems doubtful whether any permanent cure has resulted from its use.

UROLOGY.

(28) Renal Tuberculosis Treated by Nephrectomy.

E. G. Crabtree and H. Cabot (*Surg., Gynæc. and Obstet.*, December, 1915) consider that there is practically no difference of opinion among urologists in regard to the operative treatment of unilateral renal tuberculosis. The only chance of cure lies in the removal of the kidney. No case of renal tuberculosis has yet been recorded in which permanent healing has taken place, save after removal. The authors deal with a series of 70 cases treated

at the Massachusetts General Hospital. In about half the patients, treatment was sought on account of bladder symptoms. In 87% there was some albuminuria. The immediate mortality of the nephrectomy was 3.8%. In regard to sinus formation, the results were practically the same, whether drainage or immediate closure of the wound was practised, except that in the latter case it occurred at a later date, usually after the patient had been discharged from hospital. They draw the following conclusions, after making a careful study of their cases: (1) Young individuals, with early lesions of the kidney, especially when there is considerable cortical tuberculosis and peri-nephritis, do less well after nephrectomy than patients of more advanced age, even when the disease is more extensive. They ascribe this to the extent of acquired immunity. (2) Male patients offer more difficult problems in treatment than female patients, and the prognosis is less favourable in the former. In their series, genital lesions were uncommon among the female patients, while 32% of the males had some genital involvement. (3) The operation of nephrectomy for tuberculosis is not a very fatal one. The immediate mortality was that consequent on pneumonia, shock and accident. It did not exceed 5% in unilateral lesions. (4) The late mortality was 20%. Half of the deaths occurred within the first two years, and the remainder within five. (5) An absolute cure was attained in 60% of the cases. In the remainder the disease persisted, and was evidenced by abnormal urine and other symptoms. Nephritis, probably of toxic origin, secondary infections of the remaining kidney, irritable bladder at times due to cicatrices, traces of albumin and slight pyrexia, were among the most common of the permanent after-effects. (6) In 10% to 15% of cases the progress of the disease is not checked by nephrectomy. There were 9 cases, *i.e.*, 12.8% that were not improved by operation. (7) Drainage of the wound after nephrectomy yields more favourable results in regard to sinus formation than immediate closure. Approximately 25% healed *per primam*, while in 75% there was more or less sinus formation independent of the method adopted for closing the wound. Since the sinuses developed later, when drainage was not employed and several of the cases were not followed up after the discharge, a false idea of the value of this method could easily be arrived at.

(29) Obstruction at the Vesical Neck.

H. G. Bugbee (*Surg., Gynaec. and Obstet.*, December, 1915) is of opinion that high frequency spark for the relief of obstruction of the vesical neck has been of value in selected cases. He finds after searching the literature on the subject that it yields the best results in cases in which the obstruction is caused by a small amount of tissue, as in hypertrophy of the mucous membrane, in chronic inflammation of the trigone and vesical neck in both males and females, in median bar obstruction, in cicatrices, in obstruction due to enlargement of the middle lobe of the prostate, and in small, fibrous prostates. The Oudin current is usually employed, the applications being made at intervals of a week or more until the obstruction is relieved. Long intervals of several weeks appear to be preferable. In cases of general adenoma of the prostate much relief could be obtained when an operation was contra-indicated by burning through the obstruction and repeating the procedure at intervals of six months or a year. In inoperable carcinoma of the prostate, with retention of urine, considerable relief can be afforded the patient by the destruction of the surface of the growth, thereby enlarging the vesical orifice. The frequency of micturition, the tenesmus, the pain and bleeding are lessened, and all save the first disappear at times. The author reports that twelve cases of carcinoma of the prostate and bladder wall, seven cases of small median lobe obstruction without lateral lobe enlargement, nine cases of median bar obstruction, four cases of small, fibrous prostates, nine cases of general prostatic adenoma, two cases of cicatrix at the vesical neck, four cases of chronic inflammation of the vesical neck, with hypertrophy of the mucous membrane, four cases of prostatic nodules remaining after incomplete prostatectomy, three cases of tabes, and three cases of lateral lobe enlargement, making 57 cases in all, have been dealt with by this method. The advantages claimed are (1) that an anæsthetic is unnecessary, (2) that the operation is performed by sight, (3) that there is little or no pain, (4) that the reaction is slight, (5) that there is freedom from hæmorrhage, which is stopped by the procedure if previously present, (6) that there are no ulcerated surfaces or cicatrices after the dead tissue has sloughed away, (7) that the patient is not incapacitated, and (8) that the progress can be watched through the cystoscope.

(30) Stricture of the Urethra.

H. H. Morton (*Pacific Med. Journ.*, October, 1915) points out the diagnosis of stricture of the urethra should be made by means of a flexible, bulbous bougie. A steel sound is too inexact, as it passes through the stricture, dilating it. In the treatment of stricture, sounds or dilators may be employed. The effects of dilation are that mechanical stretching and small tears take place under the mucous membrane, the blood supply is increased and absorption is favoured. By repeated dilation, the scar loses its tendency to contract. After a full-sized sound no longer dilates the stricture, a dilator is employed, and irrigation with 1 in 4,000 silver nitrate solution is used. When severe bleeding takes place, dilation should be discontinued. In very tight strictures a filiform guide should be passed, and a tunnelled sound threaded over it. When a false passage gives trouble, or in very tight, heavy, dense, tortuous strictures, external urethrotomy should be performed.

(31) Epididymitis and Orchitis.

J. Wittenberg (*Medical Brief*, November, 1915) deals with the inflammatory condition of the epididymis and testis in a concise manner. In regard to epididymitis he points out that the predisposing causes are a previous attack, and some individual peculiarity. The direct causes are: (1) extension of inflammation from a posterior urethritis through the ejaculatory duct and vas into the epididymis, (2) trauma of the posterior urethra by an instrument or by a calculus, (3) injury to the ejaculatory duct, and (4) gout, cold, sexual excess, muscular exertion, etc. The inflammation usually starts at the *globus minor*; the duct becomes thickened, and the connective tissue binding the convolution infiltrated. Tiny abscesses are commonly formed. The testis is usually congested. There may be a serous effusion in the *tunica vaginalis*, the seminal vesicle is usually involved, and the vas may be in a catarrhal condition. The process usually terminates by resolution, and only rarely by suppuration. After double epididymitis, 65% of the patients remain sterile. The acute form is ushered in by discomfort and pain along the course of the vas, and later in the testis. Swelling is noted, and the urethral discharge ceases. In severe cases the swelling reaches its height in four or five days. The scrotum becomes greatly enlarged, red and œdematous. After from 10 to 14 days the pain and swelling subsides. There is usually fever and anorexia during the acute stage. In the sub-acute form inflammation may be mild from the beginning. The symptoms are the same, but less marked than those of the acute form. The inflammation may go on to a chronic form, in which the pain and tenderness are very mild or are absent. Orchitis is also common. It may be due to trauma, such as a blow or a kick or to muscular action. At times it is secondary to epididymitis. It also occurs as a complication of mumps, influenza, enteric fever, variola and rheumatism. The swelling of the testis is usually slow, and the shape of the organ is not altered. Pain is usually intense, and the scrotum is often inflamed and swollen. Relapse is common. In regard to treatment, rest in bed, a bland diet and aperients are essential. The actual cautery often works wonders for the relief of pain. The scrotum may be painted with a 10% solution of silver nitrate twice a day, or blisters may be used. Leeches are also recommended. Guaiacol (15%) or ichthyol (50% in glycerine) applied on gauze and covered with cotton wool, will be found a useful dressing. After the acute symptoms have subsided, the patient may walk about with support to the scrotum and ichthyol ointment should be applied. For chronic inflammation, 15% lead iodide externally and syrup of the iodide of iron internally, yield excellent results. The prophylaxis consists of gentle treatment of urethritis.

British Medical Association News.

MEDICO-POLITICAL.

An Extraordinary General Meeting of the New South Wales Branch was held on January 14, 1916, at the B.M.A. Buildings, 30-34 Elizabeth Street, Sydney, Dr. George Armstrong (the President) in the chair.

Medical Treatment of School Children.

The Chairman called attention to the first item on the business paper, which was to the following effect:—

> To consider and determine what the attitude of the Branch shall be on the question of acceptance by members of the appointments of medical officers, ophthalmic surgeon (part time), ear, nose, and throat surgeon (part time), physician (part time), Department of Public Instruction, now being advertised by the Public Service Board (see *The Medical Journal of Australia*, December 25, 1915, and January 1, 1916).

Dr. R. H. Todd moved on behalf of the Council:—

> That the Association is strongly opposed to any of its members accepting any of the appointments, as medical officers, ophthalmic surgeon, ear, nose and throat surgeon, physician, under the Department of Public Instruction, now being advertised, unless the Government gives sufficient guarantees that the treatment of the school children will be confined to those whose parents are unable to afford to pay for medical attendance of the kind indicated, and that the rights of private medical practitioners will be preserved.
>
> And that, in the event of such guarantees not being forthcoming, the appointments be declared inimical to the interests of the profession.

He pointed out that a vital principle was involved, and that the meeting had a grave responsibility. The results of its deliberation would make a profound impression on the future of the profession in New South Wales, and perhaps in the whole of Australia. There had been a strong development in the Department of Public Instruction during recent years, and the formation of an active medical branch was of especial importance to the profession. The Department recognized that it had a duty in respect of the health of school children. Dr. Todd held that this attitude was a right one, provided that duty was confined to proper limits. In other Australian States and in England this duty was recognized, and provision was made for the medical inspection of school children. It was now proposed to extend the principle to treatment by salaried medical officers appointed by the Department. The Association should not interfere with the work of inspection, but they were concerned with the question of treatment.

Dr. Todd referred to the work of the medical branch during the past year, with especial reference to the travelling hospitals and to the travelling ophthalmic clinics. In looking at the advertisement, he found that practitioners were required for medical inspection and general treatment of school children in the country, "and such other school medical work that may arise." Practitioners were also required for metropolitan school clinics. It therefore appeared that the medical officers might be called upon to treat persons other than school children, and that their activities would not be limited to remote country districts. The matter had been discussed at the quarterly meeting of the Council, and he had been instructed to write to the Department to enquire whether the Government would confine the medical treatment to school children whose parents were unable to pay private fees, and also whether the treatment would be restricted to school children or be extended to others. He had received the following reply from the Department:—

> Department of Education,
> Sydney, January 14, 1916.
>
> Sir,—
>
> I am directed to acknowledge the receipt of your letter of 12th instant, relative to the proposed appointment of medical officers under this Department, to carry out the treatment of children found to be suffering from physical defects at the medical inspection of schools.
>
> In reply thereto, I am directed by the Minister to state that the physical condition of the children is essentially a concern of the Education System of the State, and medical treatment is, therefore, a necessary part of the functions of this Department. As such, it is intended for school children only. No discrimination can be made, however, among children applying for treatment on the ground of financial circumstances, any more than such a distinction can be admitted in connection with any other of the advantages that are available to children under our Education System.
>
> The treatment of adults would only occur in the most isolated parts of the States, where otherwise no medical treatment whatever can be obtained, and then only in case of emergency.
>
> I have the honour to be,
> Sir,
> Your obedient servant,
> (Signed) P. BOARD,
> Under Secretary.

In England there had been a movement on the part of the County Councils to apply treatment to school children in addition to medical inspection. This had been resisted by the British Medical Association. In Queensland, a limited amount of treatment in respect of affections of the eyes, nose, ears and throat had been accorded to school children for some years. No treatment had been attempted up to the present in Victoria. Dr. Todd was not aware that this proposal had been made in any other State in the Commonwealth.

He maintained that, with proper organization, the treatment of the defects discovered at the medical inspection of school children could be adequately performed by general practitioners. He maintained that it was a fallacy to regard this as a part of the Education System. Moreover, he held that it was in the interests of the public that the Government should interfere as little as possible between doctors and patients. Medical practitioners were apt to lose independence, incentive and ambition, when they became servants of a Governmental Department.

The second paragraph of the motion would require careful consideration. The Branch was a very strong body, and was capable of still further organization. There were, however, many young men entering the profession who were not yet members of the Association. Some of these men were looking about for appointments, and the temptation of a position with a salary of £600 a year might be very great. While recognizing that these inexperienced young men might be induced to accept these positions, the speaker was strongly of opinion that the Association ought not to sacrifice its principles for any considerations of this kind. He opposed the principle that the State should undertake medical treatment, save in special cases, such as those obtaining in the naval and military services.

Dr. F. P. Sandes seconded the motion. He pointed out that one of the tendencies of the times was for the Government to interfere with all matters of public concern, including medical matters. The introduction of National Insurance in England was, in his opinion, the first step toward nationalization of the profession. State insurance had been discussed by the profession in 1913 in Australia, and had been turned down. He referred to the question of hospital abuse, and of the treatment of all and sundry in hospitals. The increase in the number of Government nominees on the Board of the Sydney Hospital had been accompanied by an increase in the admission of patients who were unsuitable for hospital treatment. He also referred to the bush nursing scheme, to the baby clinics, to the medical inspectors of school children and to other medical departmental services. These were bringing the profession deeper and deeper into the mire.

The Minister's letter had told them quite plainly what they must be prepared for. It was necessary to resist the condition of affairs created. The members should bear in mind the history of the Friendly Societies' dispute and take a very firm attitude in the present instance.

Dr. S. Sheldon raised the question whether the meeting was to deal with the individual case of the appointments advertised or whether the whole principle involved could be determined. He suggested that the position of medical

officers connected with the State Hospitals, Baby Clinics, etc., should be included. It was pointed out by the Chairman that the medical officers referred to were honorary officers, and the position was therefore a different one.

Dr. Guy Antill Pockley raised the question whether the motion would include medical officers at present acting under the Department of Public Instruction and undertaking the work of treatment.

Dr. Sinclair Gillies bade the meeting hesitate before extending its decision to men holding positions at present. Immediate action was necessary in regard to the new appointments, because the applications would close on January 24. On the other hand, he reminded the meeting that no objection had been taken at the time to the appointment of the present officers. He was anxious that they should decide at once that the new appointments were inimical to the interests of the profession. That would injure nobody, but by making the action retrospective a hardship would be inflicted on several men. It was agreed that the question of the position of the present officers should be dealt with later.

Dr. Sinclair Finlay protested against the idea that the Government should take over the management of the profession.

Dr. T. S. Kirkland was of opinion that the movement of the Department would injure the general practitioner more than the specialist. He regarded it as the introduction of nationalization of the profession. It had been suggested that young men, tempted by the comparatively high salary, would undertake the work. He thought that it would be very badly done if placed in the hands of young practitioners.

Dr. R. E. Woolnough thought there were too many facilities for giving people bottles of medicine and for performing operations without charging them. He dealt with the question of hospital abuse, and then stated that the profession was in favour of "piece-work" rather than "day labour." They objected to working for a salary. He was of opinion that the general practitioner was quite capable of carrying out the treatment for enlarged tonsils and adenoids. He referred to the question of the venereal clinics and maintained that Mr. Flowers had had his own way. Several members objected to this statement. He suggested that they should fight the Government on this question.

Dr. J. C. Halliday stated that at a meeting of the Council of the Ophthalmological Society, the members had formulated an opinion on this matter. They were opposed to the appointment of an ophthalmic surgeon on the following grounds: (1) There was no guarantee that the work could be confined to the hospital class, (2) the salary for the ophthalmic surgeon was too small, (3) the hours (4 hours at a stretch) were too long for refraction work, and (4) medical practitioners should not be paid by salary but per consultation.

Dr. T. W. Lipscomb pointed out that the majority of members were resident in the country. When the travelling hospital was inaugurated, and was supposed to go to country districts, no protest was made. It was pointed out that every local association had discussed this matter at the time, and had offered no objection, because the Department had undertaken that the hospitals should visit only outlying districts. The Department had not kept its promise. Dr. Lipscomb was in favour of making the resolution retrospective.

Dr. Antill Pockley objected to the statement that this movement on the Department of Public Instruction was getting the thin end of the wedge in. The thin end had been got in long before. At that time the trouble was vested interests. They should have objected then. Vested interests were again making themselves felt. He referred to the fact that the travelling clinics never left the railway line, and were still in railway coaches. The medical officers were treating all and sundry. While he recognized that the question of salary was a small matter, he wished to point out that the ophthalmic surgeon would be paid 8s. an hour, which was less than his taxi fares. He also objected to the proposal that the ear and throat man was to get £300, while the eye man was to get only £250. Referring to Dr. Woolnough's remark concerning the venereal clinic, he pointed out that the hospital staff at the Royal Prince Alfred Hospital has resisted Mr. Flowers's demand that no enquiry should be made, and that the Board had backed them up. The name and occupation of every patient were taken down, and Mr. Flowers was beaten on that occasion.

Dr. Cyril Shepherd was pleased that the Government had refused to give adequate safeguards. He did not believe in these safeguards. They now knew where they stood.

Dr. A. W. Welhen thought that further argument was unnecessary.

Dr. A. J. Brady dealt with the question from the point of view of the unfortunate patients. It was said that the diagnosis of adenoid vegetations was a simple matter, and that the operation was easy. Young men were liable to make mistakes. Even experienced men had had accidents and if these children were to be treated by young and inexperienced practitioners, God help them! For the sake of the children, it was necessary to tell the Government what the position was.

Dr. W. F. Litchfield maintained that it was in the interests of the public, as well as of the profession, that the profession should not be nationalized. To create a medical service for children was a partial nationalization of the profession. He asked members to vote on the matter without further delay.

Dr. Ralph Worrall did not agree with Dr. Sandes that National Insurance, as introduced in England, was equivalent to nationalization of the profession. Nationalization was one of the planks of the Labour Party; the fourth, he thought. He spoke strongly against transforming medical practitioners into departmental officers. It had been said that the salaries were comparatively high, but there was no guarantee that they would remain at this level. It was essential that the public should understand their view of the matter. The profession did not advocate the neglect of children found to be defective at the inspection. They held that existing organization should be used. He maintained that the hospitals would give more efficient service and would do the work more economically than salaried doctors.

Dr. E. H. Binney disagreed with the Minister that the treatment of the school children was part of the educational system. It would be a very bad thing if parents were relieved of the responsibility of looking after the health of their children. Treatment could be obtained through the hospitals and lodges.

Dr. E. H. Molesworth agreed with Dr. Worrall that it was necessary to tell the public how this work should be carried out.

Drs. Kevin Byrne, Gibson and Ludowici also spoke.

Dr. Brady moved, and Dr. Temple Smith seconded, that the resolution be amended by the deletion of the words "in the event of such guarantees not being forthcoming" in the second paragraph, and by the substitution of the words "the Minister having written to the effect that it is the intention not to make any discrimination on the ground of the financial circumstances of the children.'

The amendment was put to the meeting and carried unanimously. The amended motion was then put to the meeting, and was also carried unanimously.

On the motion of Dr. Sheldon, it was agreed that the Council should take an early opportunity of convening a further special meeting to consider the question of similar appointments.

Dr. Antill Pockley suggested that a notice be inserted into the lay press, requesting members of the medical profession not to apply for the positions until they had communicated with the Honorary Secretary of the Branch. It was pointed out that it would be too late to postpone this publication until the next issue of *The Medical Journal of Australia*.

Baby Clinics.

Dr. F. P. Sandes moved, on behalf of the Council:—

> That the Association strongly opposes the activities of the Baby Clinics, carried on under "The Baby Clinics, Pre-maternity and Home Nursing Board," unless sufficient guarantee is given by the Government that these clinics will not be used by persons able to pay private fees.

He pointed out that the Council had been uneasy in regard to the activities of the Baby Clinics for some little time. Considerable difficulty had been experienced in ascer-

taining what the regulations were governing these clinics, and who the honorary medical officers were. They had been successful in obtaining copies of a pamphlet setting forth the objects of the Baby Clinics and rules for the Baby Clinic nurses. It appeared that there was not sufficient guarantee against abuse. There was a footnote attached to the "objects" to the effect that the clinics were intended only for persons unable to meet the cost of ordinary medical and nursing attendance.

Dr. E. Ludowici seconded the motion. He did so in his capacity of member of the Board, because he was just as anxious that the clinics should be managed satisfactorily as any other member. He did not think that the motion was necessary, but he was of opinion that it could do no harm. The rules provided that those who were able to pay should not receive treatment. They had been asked by the Children's Hospital to allow the Baby Clinic nurses to visit certain babies at their homes after discharge from the hospital. The nurses had been instructed not to attend babies whose parents were in a position to pay for attendance, and not to recommend the clinics to these people. All the honorary medical officers were members of the British Medical Association, and no others would be asked to act. Dr. Ludowici expressed the opinion that the Minister of Public Health was unlike his active predecessor, and was not of an aggressive type. He was President of the Board. In this connexion he deprecated the remarks make about him in an article published recently in *The Medical Journal of Australia*. He assured the members that no difficulties would occur in connexion with the clinics. He would be glad if any authenticated complaints known of by members could be brought to his notice.

Dr. J. Hoets formed the opinion that the clinics were being carried on satisfactorily. In particular he did not think that general practice was being interfered with. One matter had come to his notice in his practice which he regarded as undesirable. The nurses were in the habit of calling on patients of medical practitioners and leaving the card of the Baby Clinics on the mantlepiece. This practice was objectionable, especially when there was a practitioner already in attendance.

Dr. W. F. Litchfield suggested that Baby Clinics should be properly defined as to their functions and limitations. He proposed that they should be limited to those unable to pay for attendance outside, and to babies under twelve months of age, and that they should not develope into Out-Patients Departments. He considered it wrong for a nurse to offer to give advice in cases in which a practitioner or other nurse was in attendance. He called attention to the habit not infrequently followed of the nurse handing out medicine in the interval between the visit of the honorary medical officer. He suggested that it would be well if a conference could be arranged between the honorary medical officers, the medical members of the Baby Clinics Board and the Council of the New South Wales Branch.

Dr. T. W. Lipscomb asked whether the nurses sought information in regard to the names and addresses of women recently confined from the registrars of births, marriages and deaths. Dr. Ludowici replied that this was so.

Dr. Antill Pockley considered that the safeguards were placed too much in the hands of the nurses.

Dr. A. J. Brady asked what a Baby Clinic really was. He wished to know how the babies were attended, and whether it was a function of a baby clinic to congregate sick babies within a small confine. He regarded any massing of sick babies with disfavour.

Dr. R. R. Wade held the opinion that no instructions were issued as to how the work should be carried out in the clinics. There was not sufficient discrimination in regard to the persons approached and the babies treated. He would like to see more specific rules drawn up.

Dr. Pridham, an honorary medical officer of a Baby Clinic in Woolloomooloo, pointed out that the nurses were responsible for getting information. No restrictions were placed on the manner in which the information was obtained. He was inclined to the opinion that advice was tendered to every mother with a young baby.

Dr. J. Hoets stated that the Baby Clinics were carrying out excellent work. He thought that it would be wiser to attempt to control than to oppose their activities. He spoke in enthusiastic terms of the valuable task of looking after new-born babies and instructing mothers in their care.

Dr. R. H. Todd, the Honorary Secretary, reminded members that the Baby Clinics were a corollary of the Notification of Births Act which had been passed in 1915. This Act provided for the early notification of births, for the specific purpose of bringing young mothers within reach of competent persons, who could instruct them in the manner in which babies should be handled. Under these circumstances, it was obviously essential that the nurses should seek the information from the registrars. But he admitted that the nurses were quite unjustified in going to houses where a doctor was in attendance. It was necessary to prevent the baby clinic nurses attracting patients away from their own doctors. He referred to the difficulty that had been experienced in discovering the names of the honorary medical officers. After he had traced all but one, he wrote to the Department and eventually received a complete list of these men. He thought that these doctors should be in touch with one another for the protection of their common interests. After referring to the pamphlet issued by the Board, he expressed the opinion that Dr. Litchfield's suggestion in regard to the limitation of the Baby Clinics was an excellent one.

Dr. F. Guy Griffiths wished to know whether it would be regarded as unethical for a medical man to be a party to the canvassing of non-paying patients, in the same way that it was regarded in connexion with paying patients. If it was unethical, he asked whether the honorary medical officers should not consider their positions carefully.

The Chairman ruled that the fact of canvassing for patients, whether paying or non-paying, was regarded as unethical. He agreed that the honorary medical officers of Baby Clinics should consider their position seriously.

The motion was then put and was carried unanimously.

Dr. Litchfield moved and Dr. Guy Griffiths seconded a motion requesting the Council to arrange a conference with the honorary medical officers of the Baby Clinics and the medical members of the Baby Clinics Board. The proposal was accepted by the meeting.

The meeting then terminated.

The Council of the Victorian Branch determined, at its meeting held on January 7, 1916, that publicity should be given to the scheme devised for the purpose of safeguarding the interests of medical practitioners absent on military duty by the Eastern Suburbs Sub-Division of the Branch.

War Scheme Passed at a Meeting of the General Practitioners of the Eastern Suburbs Sub-Division of the Victorian Branch.

During absence of three weeks in camp—

Lodge patients to be referred to an adjacent practitioner (or practitioners), and attended by him (or by them) free of remuneration on behalf of the principal. Mileage fees and extras, *e.g.*, midwifery and surgical operation fees, to be divided equally between principal and deputy.

Private patients seen in deputy's consulting room by deputy for principal: One-third of the fee to be retained by deputy and two-thirds by principal.

Fees for all other private work to be divided equally.

Anæsthetic fees to be retained by anæsthetist.

A careful record to be kept of all patients seen and fees received.

On return of principal, the deputy to hand over proper proportion of all cash received, out-standing fees due, and records to principal, such outstanding fees to be collected by principal and proportional amount to be handed over to deputy on collection.

No patient seen by deputy for principal to be seen professionally by deputy during a period of twelve months from date of first visit.

Medical men who are called to undertake military service for an extended period will make their own arrangements, but neighbouring practitioners will endeavour to safeguard their interests during absence on the above lines.

In the case of a medical practitioner going on extended active service, lodge secretaries be requested to inform

members on his list that any transfers will hold good only till the doctor's return from active service, and that a fresh transfer cannot be granted for a further term of twelve months.

The term "principal" includes his heirs, executors and assigns.

If a member shall relinquish his practice, or the practice be otherwise disposed of, for any reason excepting the stress of military service, this arrangement shall not be binding.

Any disputes that may occur to be referred to the Central Council of the Victorian Branch of the B.M.A., whose ruling shall be final.

It was also agreed that when any practitioner leaves on active service the general practitioners of the Sub-Division be circularized to that effect.

Also that the attention of each general practitioner in the Sub-Division be called to the above scheme, and that he be asked if he is willing to fall in with the scheme or not.

Also that cards be printed for hanging in the waiting rooms, containing the following:—

> As during the continuance of the war many practitioners have volunteered for active service, neighbouring practitioners have agreed to see their patients for them.
>
> "If your doctor has gone to the war, please mention the fact."

The following have been nominated for election to the New South Wales Branch:—

Dr. Charles Alexander Mackechnie Wilcannia.

Dr. Percy Neil Grieve, Kempsey.

Public Health.

THE HEALTH OF VICTORIA.

The following notifications have been received by the Department of Public Health, Victoria, during the week ending December 23, 1915:—

	Metropolitan. Cs.	Dths.	Rest of State. Cs.	Dths.	Total. Cs.	Dths.
Diphtheria	47	2	23	0	70	2
Scarlatina	15	0	3	0	18	0
Enteric Fever	1	0	9	1	10	1
Pulmonary Tuberculosis	19	10	8	3	27	13

The following is the return of the cases of epidemic cerebro-spinal meningitis notified to the Board during the week ending December 23, 1915:—

	Metropolitan Area. Cases.	Rural Districts. Cases.	Total Cases.
Military	—	—	—
Civil	9	3	12

The following notifications have been received by the Department of Public Health, Victoria, during the 10 days ending January 9, 1915:—

	Metropolitan. Cs.	Dths.	Rest of State. Cs.	Dths.	Total. Cs.	Dths.
Diphtheria	57	1	35	0	92	1
Scarlatina	16	0	7	0	23	0
Enteric Fever	7	3	23	2	30	5
Pulmonary Tuberculosis	36	6	18	9	54	15

The following is the return of cases of epidemic cerebro-spinal meningitis cases notified to the Board during the 10 days ending January 9, 1915:—

	Metropolitan Area. Cases.	Rural Districts. Cases.	Totals. Cases.
Civil	6	—	6

INFECTIVE DISEASES IN WESTERN AUSTRALIA.

The following notifications have been received by the Department of Public Health, Western Australia, during the week ending December 11, 1915:—

District.	Enteric Fever. Cases.	Diphtheria. Cases.	Scarlet Fever. Cases.	Phthisis. Cases.	Purulent Ophthalmia. Cases.
Fremantle East	1	—	—	—	—
Fremantle N'rth	1	—	—	1	—
Subiaco	—	1	—	—	—
Perth	3	1	1	1	4
Maylands	1	—	—	—	—
Belmont	1	—	—	—	—
Kalgoorlie	—	1	—	—	—
Boulder	—	—	—	3	—
Albany	1	—	—	—	—
Woolgar	—	—	—	—	2
Greenbushes	1	—	—	1	—
Bellevue	1	—	—	—	—
Oakabella	—	1	—	—	—
Totals	10	4	1	6	6

The following notifications have been received by the Department of Public Health, Western Australia, during the fortnight ending December 25, 1915:—

	Enteric Fever. Cases.	Diphtheria. Cases.	Scarlatina. Cases.	Pulmon'y T'b'c'losis. Cases.	Erysipelas. Cases.
Fremantle	2	—	—	1	—
Fremantle East	—	—	—	—	1
Fremantle N'th	1	—	—	—	—
Cottesloe	2	—	—	—	—
Cottesloe Beach	—	—	1	—	—
Claremont	4	2	—	3	—
Subiaco	—	1	—	—	1
Perth	4	6	2	3	—
Midland Junct'n	2	—	—	—	—
Maylands	—	2	—	—	—
South Perth	—	1	—	—	—
Kalgoorlie	—	6	—	2	—
Boulder	1	1	—	1	—
Applecross	—	—	—	1	—
Darlington	—	—	—	2	—
Osborne	1	—	—	—	—
Chidlow's Well	—	2	—	—	—
Meekatharra	—	—	—	1	—
Ewington, viâ Collie	—	1	—	—	—
Jiberding	1	—	—	—	—
Bellevue	3	—	—	—	—
Bruce Rock	—	—	—	1	—
Osborne Park	—	2	—	—	—
Day Dawn	—	—	—	1	—
Half-Caste Mission, Swan	—	—	—	1	—
Westonia	—	1	—	—	—
N'th Jandakott	—	1	—	—	—
Quirading	—	—	—	1	—
Quindanning	—	1	—	—	—
Northam	—	—	—	—	1
Leonora	1	—	—	—	—
Totals	22	27	3	18	3

The following notifications have been received by the Department of Public Health, Western Australia, during the week ending January 1, 1916:—

District.	Enteric Fever. Cases.	Diphtheria. Cases.	Pulmonary Tuberculosis. Cases.
Fremantle	1	—	—
Fremantle East	—	1	—
Subiaco	—	1	—
Perth	1	2	1
Kalgoorlie	1	2	—
Kalgoorlie Road Dist.	—	1	—
Tammin	1	—	—
Kurrawang	1	—	—
Totals	5	7	1

INFECTIVE DISEASES IN QUEENSLAND.

The following notifications have been received by the Department of Public Health, Queensland, during the week ending January 8, 1916:—

Disease.	No. of Cases.
Diphtheria	18
Scarlet Fever	13
Enteric Fever	65
Pulmonary Tuberculosis	9
Varicella	2
Cerebro-Spinal Meningitis	3
Erysipelas	6
Ankylostomiasis	1
Total	117

THE HEALTH OF HOBART.

The following notifications have been received by the Department of Public Health, Hobart, during the month ending December 30, 1915:—

Disease	No. of Cases.
Diphtheria	36
Scarlatina	2
Enteric Fever	3
Puerperal Fever	1
Total	42

Medical Matters in Parliament.

WESTERN AUSTRALIA.

(*Continued from page* 64.)

The Health Act Amendment Bill was considered in Committee in the Legislative Council on October 14, 1915.

Clauses 1 and 2 were agreed to.

The Chairman stated that he would put the sections of Clause 3 separately.

On the proposed new section 242a (venereal diseases to be treated by medical practitioners only), the Colonial Secretary moved an amendment, that after "to" in line 4 of the proposed new subsection 2, the words "a registered pharmaceutical chemist who sells or" be inserted.

The amendment, which would allow a chemist to sell certain proprietary medicines under a permit from the Commissioner, was put and carried.

The Colonial Secretary moved that the following words be added at the end of the proposed new section:—

> "Nor shall the preceding subsection apply to the sale by a registered pharmaceutical chemist in the ordinary course of business of any drug, not being a patent or proprietary medicine which has not been approved as aforesaid and not being prescribed by him for the cure or alleviation of any venereal disease."

The amendment was put and passed.

The Hon. A. J. H. Saw moved an amendment that the following proviso be added at the end of the proposed new section:—

> "Provided also that a permit as aforesaid shall not be granted to any person unless no pharmaceutical chemist carries on business within 10 miles of the place of business of such person."

The amendment was designed to restrict the sale of drugs in towns. He thought that the sale of drugs and medicines should be carried out as far as possible by chemists.

The Hon. J. F. Cullen said that in order that the amendment should read correctly he would move an amendment on the amendment that, after the word "person" in line 2 there be inserted "other than a pharmaceutical chemist."

The amendment on the amendment was passed.

After a long debate as to whether chemists or storekeepers should sell the patent and proprietary remedies under permit from the Commonwealth, the amendment was agreed to, and the proposed new section was put and passed.

On the proposed new section 242b (persons suffering from venereal disease to place themselves under treatment), the Hon. A. Sanderson asked whether action was to be taken in the case of the native population.

The Colonial Secretary replied that effective measures had been taken for years in regard to the aborigines.

The Hon. C. F. Baxter would vote against the clause, since simple cases could be treated with proprietary medicines at small cost.

The Hon. A. J. H. Saw said that if the proposed new section was struck out, the Bill might as well be dropped.

The Hon. J. F. Cullen proposed that all the compulsory clauses be discussed together.

The Chairman ruled that the clauses must be discussed *seriatim*.

Mr. Cullen moved to disagree with the ruling.

The President resumed the chair.

The motion was discussed and the Chairman's ruling confirmed.

The proposed new section was put, and a division taken, with the following result: Ayres, 13; Noes, 6; Majority for, 7.

The proposed new section was thus passed.

The proposed new section 242c was agreed to.

On the proposed new section 242d (medical practitioner to report), the Hon. A. J. H. Saw moved an amendment that in line 4, after "disease," the words "in an infectious stage" be added. He said that it was known that syphilis might last for 10 or 20 years after it ceased to be infectious. The object of the Bill was firstly that a person who was infected and liable to infect others should be treated.

The amendment passed, and the proposed new section, as amended, agreed to.

On proposed new sections 242e and 242f the Hon. A. J. H. Saw moved to add the words "in an infectious stage" after the word "disease" in line 2 of each section.

The amendments were passed, and the sections, as amended, were agreed to.

On the proposed new section 242i (compulsory examination and treatment), the Hon. A. J. H. Saw moved an amendment that in line 2 the words "Whenever the Commissioner has reason to be believe" be struck out, and the following be inserted in lieu:—

> "Whenever the Commissioner has before him a written statement made on oath or verified by solemn declaration or affirmation, which leads him to believe."

The object of the amendment was to lessen the opportunities for blackmail and for the machinations of that abomination, the anonymous informer.

One honourable member seemed to think that it was the proper thing for any one who knew that another person was afflicted with venereal disease to go privately to the Commissioner and inform him. He maintained that such a course was wrong. If anybody knew that a friend was suffering from venereal disease, and was not getting proper treatment, the course to adopt was to speak to that person and urge on him the necessity for obtaining proper advice, and not to go behind his back and give anonymous information. The amendment would also give protection to the accused person. It was necessary that the person who gave information to the Commissioner should realize the seriousness of doing so. He should also realize that if he gave wrong information, which might cause annoyance, he should be liable to an action at law.

The Hon. J. F. Cullen opposed the amendment. No informer would give information if he had to do so on oath, and if his name was to be revealed to the accused person.

Progress was reported at this stage.

Consideration in committee was resumed on October 20, 1915.

The Colonial Secretary was opposed to this amendment, as he feared that few persons would make the affirmation. In consequence, the hands of the Commissioner would be tied.

After further debate, Dr. Saw withdrew his amendment by leave.

The Hon. A. G. Jenkins moved an amendment that after the word "has" in the first line of the proposed new section the following words be inserted:—

> "received a signed statement in which shall be set forth the full name and address of the informant, stating that any person is suffering from venereal disease, and has reason to believe that such person is so suffering from such disease, and is not being efficiently treated for such disease."

The Hon. A. J. H. Saw asked Mr. Jenkins to omit the words: "is not being efficiently treated." Mr. Jenkins agreed.

The amendment was put and passed.

After brief discussion, the Colonial Secretary moved that the further consideration of the proposed new section 242i be postponed. The motion was carried.

The proposed new section 242j was agreed to.

On the proposed new section 242k (subsidized hospitals or salaried medical men to give free treatment), the Hon. J. F. Cullen and A. J. H. Saw moved to strike out the words "free of charge' in subsections 1 and 2 relating to subsidized hospitals and salaried medical men respectively.

After some discussion, during which the Colonial Secretary said that no Government would expect extra work to be done without adequate remuneration, both amendments were withdrawn by leave.

The Colonial Secretary then moved an amendment, that after "charge" in line 2 of the proposed new subsection 2 the words "to such person" be inserted. The clause then read "free of charge to such person."

The Hon. A. J. H. Saw moved an amendment:—

That all words after "treatment" in line 4 of the proposed new subsection 2 be struck out and the following inserted in lieu: "And the Commissioner shall pay a reasonable remuneration for such examination and treatment, and shall be liable to be sued for such remuneration in any court of competent jurisdiction. Any medical practitioner who neglects or refuses to examine or treat any person, as provided by this subsection, shall be liable to a penalty not exceeding £5."

The amendment was passed, and the proposed new section, as amended, was agreed to.

On proposed new section 242l (prohibition of advertisements), the Hon. A. G. Jenkins moved an amendment:—

That the following proviso be added to the proposed new subsection (e): "Provided that before any proceedings are taken under this section for printing or publishing any statement in a newspaper, the Commissioner shall notify the proprietor, printer, and publisher of such newspaper that the publication of the matter complained of is an infringement of this part of this Act; and such proprietor, printer, and publisher shall not be liable to prosecution for an offence against this section except in respect of an offence of the same or a similar nature after such notification."

The Hon. J. F. Cullen said the paragraph as it stood was applicable not only to newspapers but to the advertiser. This was undesirable. He moved an amendment on the amendment that after the word "section" there be inserted "against any newspaper proprietor, printer or publisher."

The amendment on the amendment was passed.

The amendment, as amended, was put and passed.

The Colonial Secretary moved an amendment that in paragraph (f) after the word "shows" there be inserted "or sends by post."

The amendment was passed.

The proposed new section, as amended, was put and passed.

Proposed new clause 242m (the masculine includes the feminine gender) was put and negatived.

On the motion of the Colonial Secretary, the following new section was added, to stand as Section 242n:—

So far as personal service of any notice is required under the provisions of this part of this Act, such service shall be effected by an officer of public health.

The Hon. A. J. H. Saw moved that the following stand as Section 242o:—

The Commissioner shall conduct free of charge bacteriological or other examination which is required by any medical practitioner who has notified the Commissioner under Section 242d that he is attending or treating a person suffering from venereal disease.

The proposed new section was put and passed.

The Hon. A. G. Jenkins moved:—

That the following be added, to stand as section 242l: "All proceedings under sections 242a, 242b, 242c, 242d, 242e, 242f, 242h, 242i, 242j in any court shall be heard in camera; and it shall be unlawful to publish in any newspaper a report of any such proceedings. Penalty: For a first offence, One hundred pounds, or imprisonment with or without hard labour for not exceeding six months; for any subsequent offence five hundred pounds, or imprisonment with or without hard labour for not exceeding twelve months."

The proposed new section was put and passed.

The Hon. A. G. Jenkins moved that the following be added, to stand as section 242n:—

"Every person employed in the administration of this part of this Act shall preserve secrecy with regard to all matters that may come to his knowledge in the course of such employment, and shall not communicate any such matter to any other person except in the performance of his duties under this Act. Penalty: One hundred pounds."

The proposed new section was put and passed.

Progress was reported.

The Committee resumed on October 21, 1915, when it considered the postponed clause 242i (compulsory examination).

The Hon. A. J. H. Saw moved an amendment that after "venereal disease," in line 2 of the proposed new subsection 2, the following words be inserted:—

"in an infectious stage, and is, in the opinion of the Commissioner likely, unless detained, to infect other persons."

The amendment was put and passed.

The Hon. A. J. H. Saw moved an amendment that on subclause 3, after the words "infectious condition," line 3, there be inserted "and that further detention is necessary in the public interest, and so reports to the Governor."

The amendment was carried.

The Hon. A. J. H. Saw moved a further amendment:—

That in subclause 4 the words "When any person is subject to detention under this section any judge or resident or police magistrate may by order under his hand direct any two medical practitioners" be struck out, and the following inserted in lieu:—"When any person is subject to detention under this section he may from time to time apply in writing to a judge of the Supreme Court or a resident or police magistrate in the district in which he is detained to be examined by two medical practitioners, and thereupon such judge or magistrate shall by order direct any two or more medical practitioners."

The amendment was put, and a division taken, with the following result: Ayes, 17 Noes, 4; Majority for, 13.

The amendment was thus passed.

The Colonial Secretary moved an amendment that after "order" in line 4 the words "(one of whom shall be nominated by the patient or some person on his behalf") be inserted.

The amendment was passed.

The Hon. A. J. H. Saw moved an amendment:—

That all words after 'examination" in line 8 be struck out and the following inserted in lieu: "If it appears from such report that all the medical practitioners are unanimously of opinion that the person is cured or is free from venereal disease, or if such report discloses that the person is suffering from venereal disease in an infectious stage, but the Commissioner fails to satisfy the judge or magistrate that the person would be likely to infect others unless detained, then the judge or magistrate shall order the release of such person, who shall be liberated from detention accordingly; provided that no application shall be made by a person so detained within six calendar months of a prior application having been made by such person.

The amendment was passed.

The Hon. A. J. H. Saw moved an amendment that the following be inserted, to stand as subsection 5:—

"When any person is subject to examination under subsection (1) or to detention under subsection (2) or subsection (3) he shall be entitled as of right to inspect any written statement made to the Commissioner under subsection (1) and to have a verified copy of every such statement."

After discussion, progress was reported.

(To be Continued.)

Special Correspondence.

(By our Special Correspondent.)

LONDON LETTER.

Maternal and Infantile Mortality.

A supplementary statement, made in elaboration of the report of the Medical Officer of the Local Government Board for 1914-15, with special reference to maternal and infant mortality was issued as a Parliamentary Paper on October 21, 1915.

It is acknowledged that, in many parts of the country, parturition is still associated with excessive mortality and sickness. This report is intended to direct attention to the fact and to encourage measures to lessen the incidence both of disease and death.

As regards the national aspect of the subject, a table is shown to prove that there has been a remarkable decline in the national birth-rate, and in the national death-rate. By the simultaneous decline of both birth-rate and death-rate a fall in the rate of natural increase of the population has been postponed. The balance of emigration over immigration, when 1891-1901 is compared with 1901-1911, has involved some decrease in the rate of actual increase of population. The death-rate can still be greatly reduced. A very high proportion of the deaths occurring under the age of 70 are unnecessary deaths. Of the total deaths at all ages, 44% occur under the age of 40 and 76% under the age of 70. But the fall in the death-rate cannot keep pace indefinitely with a continuous fall in the birth-rate. Already the average age of the national population and its consequent proneness to death is on the increase. Had the birth-rate of England and Wales been the same in 1914 as in 1876, 467,837 additional infants would have been born in 1914. These figures emphasize the importance of preventing, so far as is practicable, further decrease of the balance of births over deaths by measures directed to saving the lives and maintaining and improving the standard of health of mothers and of their children.

Some of the evils associated with this excessive maternal mortality are set out in the third part of the report. The close relationship between factory work for married women and excessive mortality from childbearing is indicated. Although dogmatism as to causation is impossible, and the need for further inquiry is suggested by the facts under each heading, the Medical Officer says the presumption is justified that better arrangements for ante-natal care and for midwifery attendance would go far to reduce the mortality from child-bearing.

In order that official action may be taken for reducing maternal mortality and suffering in child-bearing, measures must be adopted for ascertaining what cases need help. The report recommends:—

(*a*) The provision of skilled assistance at maternity centres, which is one of the best means for obtaining such information.

(*b*) The notification of births, which provides essential information.

(*c*) The notification of puerperal fever when made more effective. Hospital provision for the treatment of puerperal fever is most valuable in itself, as well as in securing more complete notification.

(*d*) The collection of the statistics of hospital experience.

(*e*) The provision of pathological aids for diagnosis, which will lead to the better diagnosis and treatment of many cases of illness in child-bearing.

Ante-natal work by means of consultations and clinics, together with home visiting, should be organized. In some areas the supply of midwives is inadequate to the public needs, and their inspection is done to a very varying extent in different counties and county boroughs. The statistics as to sending by midwives for medical help do not at present justify any general inferences.

Guy's and St. Thomas's Hospitals.

Statistics recently published at Guy's and St. Thomas's Hospitals for last year bear eloquent testimony to the good work which has been accomplished by these two great hospitals, much of which has been in connexion with the treatment of the sick and wounded both at the front and at home.

At Guy's 522 beds out of 644 available were, on an average, always occupied, and the number of in-patients during the year was 9,931. The expenditure on these was £60,485, or an average of £6 8s. 5d. each. Of new out-patients there were 115,982, who made 474,896 attendances costing £12,326, or, on an average, 2s. 1d. for each patient. The total income last year was £99,629, including legacies of £49,247, and the total expenditure £76,569.

At St. Thomas's, out of 592 beds available, 531 were, on the average, occupied throughout the year, 9,671 in-patients being treated at a cost of £67,807, or an average of £7 8s. 9d. each. The attendances of the 69,895 out-patients numbered 249,427, and the expenditure on this department being £11,739, shows an average of 3s. 4d. spent on each patient. In the electrical department the governors devoted £8,313 to the purchase of radium. The total income last year was £139,081, including legacies of £69,893, and the total expenditure £83,121.

Correspondence.

A SCHEME OF UNIVERSAL MEDICAL SERVICE.

Sir,—It was with extreme interest that I read Lieutenant-Colonel Gordon Craig's able letter on "A Scheme of Universal Medical Service" in the recent issue of the *Journal*. If some such scheme could be put into operation, the difficulty anticipated in securing an adequate supply of suitable medical men would be overcome, and the services of each man could be utilized to the best advantage. Doubtless, medical men from time to time have experienced delay and disappointment when making application to the military authorities, but we must realize the difficulties they have to contend with and be charitable. Many of us are apt to offer our services hampered by impossible conditions, and to think more of our "likes and dislikes" than the good of the service. After a period of active service one realizes of what small importance an individual is in a war of the present magnitude. The question of rank is a troublesome one; all cannot hold senior rank; but if we are really patriotic, we should be prepared to accept any rank, if by so doing we are able to do our share to help in the present struggle. The example of many of our friends, who are enlisting as privates in the infantry, should not be without its lesson to those of us, who are fearful of loss of professional dignity, if we accept lower rank than some of our more fortunate colleagues.

It should be remembered that the holding of a commanding position in civil practice does not necessarily qualify a man for high military rank. There is work to be done in all branches of the profession; consultant, specialist and general practitioner, and a sympathetic relationship between the Principal Medical Officers of the various States and the British Medical Association is essential. This can easily be secured, if we are all prepared to do our best to help and avoid carping criticism of men and methods.

For service abroad the younger medical men, who are physically fit, are undoubtedly the most suitable; first of all the single men, and next the younger married men. To enable these to go to the front the active assistance of older men in looking after their interests whilst away may be necessary. For service at home the older men are needed, first of all the financially stable, to do duty in camps of training, examination of recruits at different recruiting depôts, on medical boards, and at military hospitals. A fixed term could be arranged for service at home, but full time service is necessary during the period specified in most cases, be it three, six or twelve months.

The specialist should not be downhearted if there is no appointment available where he can practise his specialty. He will find that his knowledge of general medicine and surgery will be quite sufficient to enable him to do the medical work necessary in examining recruits or acting as medical officer in camps of training. The question of

the continuous supply of medical men, especially suitable men, is an urgent one, and the British Medical Association has a great opportunity now to be of real service to the country.

Yours, etc.,

ARCHIE ASPINALL, Major.

1st Field Ambulance, 1st Australian Division,
January 10, 1916.

P.S.—Medical men joining the Army Medical Corps will find it to their advantage to purchase the following books. In Sydney they can be obtained from Messrs. Angus & Robertson, Castlereagh Street. "King's Regulations," "R.A.M.C. Training," "Field Service Regulations," Parts I. and II., "Field Service Pocket Book," "Infantry Training."

A QUESTION OF MILEAGE.

Sir,—Because of a dearth of "locums," I relieved my medical neighbour. As he has lodges and I have none, I resided at his house, some miles away from my practice. While there I was specially called to an accident case one Sunday night in my own township. I left my neighbour's town at 9 p.m. and returned to it at 2.30 a.m. Would I be entitled to mileage for this particular visit?

Yours, etc.,

"ENQUIRER."

January 12, 1916.

[On the assumption that "Enquirer" was called to a private patient, he would presumably be justified in charging mileage for the visit referred to. Were the patient a lodge patient, his action would be governed by paragraph 9 of the Common Form of Agreement (Victoria), provided that this agreement held good in respect of the lodges in the district. We would advise "Enquirer' in either event to seek guidance from the Council of the Victorian Branch.]

THE MINISTER OF HEALTH.

Sir,—In the absence of more definite information than is contained in your attack of December 25, 1915, on the Minister of Public Health, many members are not likely to agree with your views.

It comes as a surprise to find the policy of a former Minister praised, a policy which the New South Wales Branch of the British Medical Association did its utmost to oppose, which put the fear of nationalization into the hearts of the Council. Are not the members of the Council grateful that this policy has not so far been pressed by the present Minister?

We must not forget that the proceedings undertaken before the Medical Board, resulting in the conviction of medical practitioners for unethical conduct, must have received the approval of the Minister, for his Department paid all the expenses of the matter; that the recent reciprocal amendments to the Medical Act did not receive ministerial opposition; that the urging on to further action was, so far as the Baby Clinic is concerned, unnecessary, for the branches of this clinic have increased from two to five.

All these things represent progress in the right direction, will prove of great public benefit, and certainly not detrimental to the medical profession.

Yours, etc.,

E. LUDOWICI.

235 Macquarie Street, Sydney,
January 18, 1916.

Obituary.

WILLIAM ODILLO MAHER.

The medical profession, and particularly the special branch of ophthalmology, has suffered a severe blow through the death of Dr. W. Odillo Maher. His numerous friends and a host of patients, who had learned to value both the practitioner and the man, mourn his loss. One who knew him intimately writes that "all honour should be given to this noble useful life, which has come to so early an end." It has been spent "going about doing good." Widespread sympathy has been extended to his widow and family. One of his sons is a member of the medical profession, as is his brother, Dr. Charles Maher.

William Odillo Maher was born in Sydney in 1858. He was educated at St. Mary's College, Lyndhurst, and at St. Patrick's College. At the conclusion of his school education he passed into the Sydney University, where he spent a year. He then went with his brother to Ireland, and in 1881 took the degree of M.D., Ch.M., at the Royal University. In the following year he passed the examination for the membership of the Royal College of Surgeons in England. He served as House Surgeon at the Moorfields Hospital, and later became clinical assistant. He then returned to Sydney, and started a career as an ophthalmic surgeon, which has proved so eminently successful. His first appointment was that of Ophthalmic Surgeon to the Government Asylum at Liverpool and Parramatta. In 1886 he was elected Honorary Ophthalmic Surgeon at the Sydney Hospital, and at St. Vincent's Hospital, both of which positions he has retained until the time of his death. Later he was selected Examiner in Ophthalmology at the Sydney University.

Dr. Maher has occupied a number of important positions, including that of President of the Eye Section of the Australian Medical Congress, held in Adelaide in 1905; Member of the Consulting Board of the Base Hospital at Randwick; Fellow of St. John's College; member of the Council of the New South Wales Medical Union, and since 1913 a member of the Medical Board of New South Wales. He has contributed a number of important articles to medical literature dealing with various matters connected with the science of ophthalmology.

In 1900 Dr. Odillo Maher was one of many victims to the great railway accident in the Eveleigh Tunnel. He sustained injuries to his hands, and suffered severely from shock. This accident necessitated a prolonged interruption in his professional work, but on his return he was gratified to find that none of his patients had forsaken him.

Dr. Odillo Maher was recognized to be an exceedingly charitable man, an excellent Roman Catholic, and a model husband and father. His science and his family absorbed so much of his energies that little was left for outdoor recreation. His colleagues found him a courteous and delightful companion, and his memory will remain with them for many years.

Dr. Worrall writes:—

Thirty years ago, in reading Hartridge on refraction of the eye, I came across a paragraph extolling the work in retinoscopy of Dr. W. Odillo Maher, "late house surgeon at Moorfields." I little thought at the time that in a few months I should make the acquaintance of the man referred to and remain intimately associated with him until his death. In 1885 I met Dr. Odillo Maher, and in 1886 became his tenant in 20 College Street. This relationship continued until we both left College Street for Macquarie Street in 1906, and during the whole period no written agreement between us existed. I always felt that I was dealing with a man whom nothing would induce to break the spirit of the agreement, and that, therefore, the letter was unnecessary. Many another lesson he set before me: punctuality, order, method, conscientious thoroughness in work, consideration for poverty, grateful loyalty to his colleague, Dr. Thomas Evans, who had treated him with great generosity, and, above all, the principle that duty should come before all else. I venture to say no one who knew Dr. Maher well would ask him to vote or take any action which one would be unable to prove would be in accord with his sense of duty. I recall so well the patient, critical hearing he gave to all one had to say, then the pause and the clearly expressed, well-reasoned judgement which conveyed his own opinion. The guiding principles of his life might be summed up in one word: rectitude. No man lived more unswervingly in line with the highest tenets of his religion.

Speaking yesterday to one who had been a schoolfellow of Dr. Maher, he said it was characteristic of the man that the only fight he had at school was on behalf of a little boy who was being bullied by a big boy. The profession and the community are the poorer by the death of such a man, and it is perhaps not unfitting that one who has known him so long and so intimately should call attention to the "footprints in the sands of time" which he has made, and the high example he has set.

Proceedings of the Australasian Medical Boards.

SOUTH AUSTRALIA.

Harold Fleming Dunstan, M.B., B.S. (Melb.), 1914, has been registered under the Medical Act of 1880 as a legally qualified medical practitioner.

Books Received.

THE STRUCTURE OF THE FOWL, by O. Charnock Bradley, M.D., D.Sc., M.R.C.V.S., 1915. London: A. & C. Black, Ltd.; Crown 8vo., pp. 153, with illustrations. Price, 3s. 6d.

ENCYCLOPÆDIA MEDICA, Second Edition, under the General Editorship of J. W. Ballantyne, M.D., C.M., F.R.C.P.E.; Vol. II., Aspiration to Chlorodyne; 1915. Edinburgh and London: W. Green & Son, Ltd.; Sole Agents for Sydney and Wellington, N.Z.: Butterworth & Company (Australia), Ltd.; Royal 8vo., pp. 677, with illustrations. Price, £1.

Medical Appointments.

Dr. R. D. Kennedy has been appointed Medical Officer of Health for the Avon District, Western Australia.

Mr. H. G. Wignall has been appointed Analyst to the Kalgoorlie Road Board, Western Australia.

Dr. A. A. Palmer has been appointed a Justice of the Peace for New South Wales.

The following have been appointed members of the Dental Board of New South:—Messrs. Donald Smith (President), Alfred Burne, D.D.S., Austin William Cleary, John James Kelly, M.D., M.S., Montagu Alfred Noble and Arthur Aubrey Palmer, M.B., F.R.C.S., Edin., L.R.C.P., Lond., M.R.C.S., Eng.

Dr. W. H. Boazman has been appointed Government Medical Officer at Parkes, New South Wales, in place of Dr. H. O. Johnson, resigned.

Dr. B. R. Ascher Taylor has been appointed Government Medical Officer at Temora, New South Wales, in place of Dr. G. C. Harper, resigned.

Dr. A. S. Grimwade has been appointed Officer of Health for Geelong City, Victoria, during the absence of Dr. R. G. McPhee, on active service.

Dr. F. J. Hensen has been appointed Officer of Health for the Seymour Shire, Victoria, in place of Dr. J. C. Morton (resigned).

Dr. John Stewart has been appointed an Official Visitor to the Mental Hospital, Parkside, South Australia, under the provisions of the Mental Defectives Act, 1913, in place of Dr. E. J. Brown.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xiii.

Proserpine District Hospital, North Queensland, Medical Officer.

Royal Australian Naval Reserve, Surgeon.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
QUEENSLAND. (Hon. Sec. B.M.A. Building, Adelaide Street, Brisbane).	**Brisbane United F.S. Institute.** Croydon Hospital.
WESTERN AUSTRALIA. (Hon. Sec. 230 St. George's Terrace, Perth).	**Swan District Medical Officer.** **All Contract Practice Appointments in W.A**
NEW SOUTH WALES. (Hon. Sec. 30-34 Elizabeth Street, Sydney).	Department of Public Instruction—New Appointments as Medical Officer, Ophthalmic Surgeon, Ear Nose and Throat Surgeon, Physician. **Australian Natives Association.** **Balmain United F.S. Dispensary.** **Canterbury United F.S. Dispensary.** **Goulburn F.S. Association.** **Leichhardt and Petersham Dispensary.** **M.U. Oddfellows Med. Inst., Elizabeth Street, Sydnev.** **Marrickville United Friendly Societies' Dispensary.** **N.S.W. Ambulance Association and Transport Brigade.** **N. Sydney United F.S.** **People's Prudential Benefit Society.** **Phœnix Mutual Provident Society.** **F.S. Lodges at Casino.** **F.S. Lodges at Lithgow.** **F.S. Lodges at Mudgee (except A.H.C.G., M.U.I.O.O.F & U.A.O.D.)** **F.S. Lodges at Orange.** **F.S. Lodges at Parramatta, Penrith, and Auburn.** **F.S. Lodges at Wellington.** **Newcastle Collieries—** **Killingworth.** **Seaham Nos. 1 and 2.** **West Wallsend.**
SOUTH AUSTRALIA. (Hon. Sec. 3 North Terrace, Adelaide).	**The F.S. Medical Assoc. Incorp., Adelaide.**
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	F.S. Lodges, Wellington, N.Z.

Diary for the Month.

Jan. 25.—N.S.W. Branch, B.M.A., Medical Politics Committee, Organization and Science Committee.
Jan. 26.—Vic. Branch, B.M.A., Council.
Feb. 2.—Vic. Branch, B.M.A., General.
Feb. 4.—Queensland Branch, B.M.A., General.
Feb. 10.—Vic. Branch, B.M.A., Council.
Feb. 11.—S. Aust. Branch, B.M.A., Council.
Feb. 15.—N.S.W. Branch, Executive and Finance Committee, Ethics Committee.
Feb. 29.—N.S.W. Branch, Medical Politics Committee, Organization and Science Committee.

Covers for binding *The Medical Journal of Australia* for Vol. II., 1915, can be obtained on application to the Manager, B.M.A. Building, 30-34 Elizabeth Street, Sydney. The price of a cloth cover is 2s. and of half leather 3s. 6d.; postage, 7d.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrury be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.